VOLUME III NUMBER 4

THE ELEMENTARY SCHOOL TEACHER

DECEMBER, 1902

LITERATURE IN THE ELEMENTARY SCHOOL.

III.

THE PRESENTATION OF THE MATERIAL AND THE IMMEDIATE RETURN.

IN this day of reaction, one might almost say revulsion, against "methods" in teaching, it is with much misgiving that one brings himself to speak of the practical details of the presentation of his subject, lest he fall under the suspicion of setting forth a "method." We can not be too glad of our emancipation from mechanical devices, personal contrivances, small esoteric schemes, in favor of the original creative work of the teacher, based upon expert knowledge of his subject, and confidence in its educational efficacy. The protest against artificial methods should not, however, blind us to the fact that each body of teaching material, taken together with the conditions under which it is to be presented, suggests — nay, imposes — many of the steps to be taken in the handling of it. These steps have a philosophical basis; they are demanded by the nature and organization of the subject-matter; they are the inevitable and inseparable expression of the teacher's knowledge and point of view; they are the necessary avenues of communication between him and his children. It is such details that we desire to discuss in this paper — to which may be added certain minor records of experience, given merely for what they are worth.

The thing most important after the bit of literature has been chosen is that it should be given to the child in a good and artistic form. If it is an old story, whose original form is such

as not to be available for the child, then the teacher must choose another form artistic and beautiful, or make his own rendering of it artistic and beautiful. He more than defeats his purpose who transmits to his children, no matter how good a story, in slip-shod sentences, commonplace phrasing, go-easy enunciation, or worse than that, in the ostentatiously child-like language and manner which constitutes official kindergartenese, or worst of all, in that tone of cheap irony that so many people seem to feel appropriate in communing with the child. It is the tone of the average adult when he enters into conversation with anybody under twelve—an underbred or quite uncalled-for tone of badinage, of dislocation, of insincerity. It is this cheap irony that quite disqualified Thackeray for writing for children — it taints every word of *The Rose and the Ring*. It lingers in Kingsley, and has to be edited out of *The Water Babies*, as one reads that book to a child. It is an unpardonable misunderstanding of the dignity and seriousness of childhood to offer it babble, when it asks only simplicity, or to treat flippantly what to it are the serious things of art.

The teacher who has to do with children so small that he must tell the story to them should so thoroughly know and love his story, should so respect his material and his audience that a good and beautiful literary form flows from him naturally and inevitably. Failing of this, let him find or write out an acceptable and dignified form of it, and memorize it. There is no denying that in the hands of a cold and mechanical person this form will be poisoned by priggishness and false propriety. It will lack spontaneity and warmth. But the artistic danger from it, even so, will be less than from the haphazard, common-place version such a person would give impromptu. Just as soon as the child is old enough to be read to, and this is very early if the teacher knows how to read, the material should be presented in the original best form, from the book. The Perrault fairy tales, for example, are perfect in their quaint eighteenth century setting; there is a version of the Robin Hood tales, sound to the last syllable; there is a translation of the *Odyssey*, whose every line is golden. These things the teacher should give to his children

just as they are. Of course, as he reads these he is obliged to edit out a passage now and then, for one reason or another. There are certain *longueurs* in the Robin Hood that one may well spare the small audiences; certain passages in the Odyssey are too mature, or deal with topics too advanced for the child's experience; one can not read the otherwise lovely story of *The Ugly Duckling* without suppressing Andersen's cynical egoism.

So far as concerns this small body of writing that we are using to teach literature, it should be read to the child, not read by him, practically throughout the elementary period. Not within that period does the child reach the stage of reading needful in the interpretation of literature. He masters the difficulties of mechanical reading; he may achieve the plane of intelligent reading, but he does not rise to the next plane—that of appreciative reading, well-nigh the highest achievement of the human mind. In the presentation of poetry it is indispensable that the teacher read or recite it to the child. Only when we have become most experienced readers can we get a hint of the movement and music of the verse by its look upon the printed page. The child, of course, sees nothing of this, and involved in the difficulties of his inexpert reading and depending upon his own weak and unpractised voice, he misses the essentially literary things in his poem. In the story, too, the child reading for himself misses seeing the words for the trees. He is obliged to go too slowly to catch the movement of the story, to differentiate its parts and to carry its thread of continuity above the details.

Let no teacher suppose that it is a light and easy thing to to read a bit of literature to the children. First he must know it and love it; let him not read anything he cannot love and respect. Then he must render it to them as a work of art. He must give it to them as a whole thing, carrying the thread of unity clear and strong through all the details. He must delicately indicate the parts, unobtrusively marking the close of a scene, an incident, a movement, a change of mood; he must give the tone and color that belong to his piece; he must observe the lights and shadows; he must distribute the

emphasis, lightening the telling detail and subduing the accessories; he must radiate—always radiate both light and heat, and all these things are as essential, if his audience be seven years old and his masterpiece be *Cinderella*, as they would be were the one *King Lear* and the other college seniors.

That teacher is wise who keeps his literature lessons from all entangling alliances with reading lessons. It is quite another thing to say that children's reading books should have some literature in them, from saying that their literature lessons should be reading lessons. Of course, just as it is the business of every teacher in the elementary school—yes, and in the secondary school—aye, and in college—to teach language, so it is his business to teach reading when it comes in the way. And if it comes about that a child is to read a bit—a poem, his own composition or what not—it must be seen to that it is done as well as possible. But let the lessons in literature never concern themselves with drill in reading.

The nature of the bit of literature chosen must guide the teacher in the first presentation of it to his class. When the movement is rapid and the interest in the action or the plot intense, it may be best to go rapidly through the whole, not pausing for any details. Then go over it slowly again, pausing for discussion and appreciation of details. In other bits this deliberate and more intensive reading may naturally be the first reading. There may well be several readings of anything worth reading once. Indeed, the mistake most often made in children's reading is that of giving them too many things. They are content to go many times over the same thing, and it may justly be said to be the fault of the teacher if they do not derive some new profit from each re-reading of every good piece of literature.

Now it is impossible to indicate in more than a general way the details and smaller points over which a teacher would linger with his children, or to explain precisely what one may mean by "lingering." It may be a picture:

> "The cattle are grazing,
> Their heads never raising.
> There are forty feeding like one."

It may be a brief image: "Burly dozing bumble-bee," or "A sweet pie of tender brown larks;" a bit of tone-color:

> "The lights begin to twinkle from the rocks,
> The long day wanes, the slow moon climbs;"

a picturesque or archaic word: "The golden orange *glows*;" or "He strung the bow right *deftly*;" or a figure of speech:

> "The daffodil
> Unties her yellow bonnet
> Beneath the village door;"

a specially pregnant or pivotal sentence: "Now, Cinderella's godmother was a fairy," or "Cyclops, you asked my noble name, and I will tell it. My name is Noman;" some small complete curve of the action of the story, as Nausicaa with her maids washing her beautiful clothes by the river-side. These must serve as examples. Over such details the class would naturally pause to discuss, to appreciate, to visualize, or otherwise thoroughly to appropriate. It would be a mistake to pause over every such detail, or to stop to make sure that the children apprehend intellectually every item as it appears. The teacher may trust much to the spirit of the masterpiece to illuminate and interpret the details, and still more to the repetitions, which should be many,

Children are none the better listeners for being held in suspense as to the issue of a long story. It seems wise to relieve the strain upon their feelings early by telling them the outcome, or confirming their guesses at it. Suspense and surprise are after all rather cheap artistic devices, stimulants that the unjaded interest of the child on the one hand, and the trained attention of the critic on the other, do not need. It is well to substitute for them as early as possible the purer and deeper pleasure of recognition.

There should be discussion of the persons and motives, feelings and objects handled in the literature. This discussion needs a wise and steady teacher as a guide. Discussion of character in these classes as in older ones, easily degenerates into mere gossip, pernicious attributing of motives and idle

chatter. It devolves upon the teacher to hold the discusssion up, to keep it noble. Every teacher knows how one petty or commonplace child can drag a class discussion into the very dust by a single suggestion. This he must guard against and counteract instantly. It deepens the meaning of the piece of literature for the child if the discussion of the characters, the motives, the issues, is made as practical and as human as possible. These discussions should lead the child always to feel that this thing he has been hearing is life; that it rises out of actual human experience, and should turn immediately into human experience again. Let him match the daring deed in the story with one from actual life; the generous motive with another as generous; let him transfer his scorn of the villain's treachery or the coward's weakness to some situation he has to face. By any, by all means, the child should be brought to see that this art but rises out of life, and only hovers above it in a finer and purer atmosphere.

To this end, as well as to serve other purposes, it is well to help the children to transfer into literature some details of their actual life, some objects with which they are familiar. There is material for days of study in such a group of objects as this (these objects were the material of an actual experiment): a gold coin, a brass button, a cluster of daffodils, an orange, a lemon, a bunch of carrots. The process of study and discussion is not difficult by which the plainer fruits and vegetables may be so apprehended in their own good qualities and so adorned with those of their beautiful associates as to be elevated to the plane of art, and be seen ever after as things of beauty. Then there is the opportunity for choice among the color words for learning the value of *glow* and *gleam* and *shine* and *glitter*, the teaching of a fine old proverb, and many other radiating things, all literary.

But the teacher who has once grasped the principle that it is from life that literature gets its truth, its seriousness, its weight, and that it must turn back upon life something of its charm, its joy, and its freedom, will find his own means for enforcing it and illustrating it.

It seems only safe to limit the discussion to the immediate return that the teacher may expect from the little child. The immediate return is all that we can really observe, and all that we can speak of with any certainty. The teacher of art, music, painting, or literature, is altogether too likely to disquiet himself or to resort to unwise methods of forcing the child in order that he may himself see, or may display to expectant friends, results in the child that would have legitimately ripened after years or months. *Art is long.* Like the human being it had a long infancy, being destined to a long and vicissitudinous life. In each individual, also, every art must germinate slowly. We must wait years for the bloom—a lifetime, if need be, for the fruit. We simply cast our bread upon the waters, or as they now have it, sow our rice upon the flooded fields, trusting that many of the grains will find soil and take root. This attitude of mind we must preserve toward many of the most desired results of the teaching of literature. But it is only a matter of pedagogical morality to ask from them some immediate return for what they are given. The simplest of these returns is that of the poem memorized. Many, perhaps all, songs and ballads taught to them as literature, should be implanted in their memories. Many repetitions of the little poem will easily fix it in the child's memory without tediousness, and "without tears," and every child will delight to repeat it with such taste and style as his teacher can guide him into. The stories, too, the smaller children may repeat, provided only the teacher see to it that they are given in good form. A careless or trivial retelling of the story is most demoralizing from the artistic point of view. There are reasons why this repetition of the story should always be impromptu and lightly done. All deliberate paraphrases and mere reproductions of what has been given him are bad for the student at any stage of his study. If one is teaching literature as an art at all, he should emphasize, whenever possible, the inviolability, the psychic necessity, of the form it originally took. But it is quite another matter that the teacher should ask for work from his child, inspired or suggested by what he has been learning. When the child is in thorough imaginative sympathy with

his material, when he has imbibed the spirit, caught the tone, accumulated the vocabulary, had a vision of the relations and associations, then he is ready to produce, not to reproduce. His teacher need have little fear of imitation. Of course, in matters of form his work will be largely imitative. Is it not so on the formal side of all his work? But the spirit in the normal child is original and creative. His new adventure of Odysseus has in it the same *trieb* that produced the old ones. And when he is but a little older this same *trieb* will forge for itself a new and original form. As a mere practical matter the teacher will soon discover that some of the younger children who have mastered the mechanics of writing may safely be required to write out their own productions, while many of the older ones, together with most of the younger, must be allowed to dictate their matter—otherwise in the fullness of their hearts they stumble over their own feet, as it were, and get nowhere; and the genuine flow of literary creation is dammed and dissipated by the mere embarrassment of the pot-hooks and hangers.

It is a shame that it is sometimes necessary to correct the grammar and spelling of these literary productions. As a mere matter of social duty it is probably well for the teacher to do this for an occasional essay, and call the child's attention to the corrections. But as a rule it has a better literary effect if the most egregious mistakes are silently eliminated, and the little theme given back to the child to be read in its improved form. Every child profits immensely if allowed to compose an occasional essay in the teacher's presence, under his criticism. He is helped most easily in this way toward the larger matters of organization, and it is possible in this as in no other way to repress the too fanciful or illogical child, and to set going the unimaginative and coldly logical one. For similar reasons the class composition is so extremely helpful. The criticism and suggestion of their contemporaries and coequals is most effectual, and a group of children which has achieved anything like homogeneity of spirit forms its own best critics and stimuli. The group-tale, the group-drama, or the group-ballad forms a most interesting contribution to the study of literary evolution. The dramatization

of anything that lends itself to that process is a kind of production that most teachers avail themselves of. The mere pantomime dramatization of the smallest children — the "infant" plays that they base upon their stories — are in the right direction. The danger that besets little people's dramatizations, as apparently that of their elders, is that it ceases to be literature, so that what is not inexplicable dumb-show must be set down as noise. Nothing is more difficult than the problem of giving the children's dramatic dialogue a tone better than mere commonplace, or different from mere bombast. And as they generally choose the most thundering issues and situations to dramatize, it is always wisest to lean toward the bombast, as being both more spontaneous and more literary.

On the scale of things elementary, and setting the matter in the best perspective attainable, it would seem that four half-hours a week of this more narrowly literary training would be sufficient. It will amount to considerably more than this as it asserts its natural affinities and receives its due share of attention in the modeling, in making of pictures, in music, in reading lessons, in specific lessons in writing, and in the lessons in language other than the vernacular.

HORTICULTURE IN THE SCHOOL.

II.

THE purposes of the school garden are especially to develop an interest in flowers, to afford practical instruction in caring for them, to serve as an example and stimulus for the home gardens of the pupils, and to diffuse knowledge of the laws and processes of vegetable growth. There lies in the background the thought of a better agriculture brought to pass through this agency, and the richer individual life that finds delight in the appreciation of natural beauty.

To secure the best results all features of the garden must contribute to these ends. There must be system and harmony in the position and arrangement of the garden with reference to the surroundings of the school. It is impossible to lay down many rules of universal application. So much depends upon the available space, the position of the shade trees, the slope of the land. There must be a playground for the children upon which not even a school garden should encroach. We have rejoiced in the recent revival of interest in tree-planting about school premises ; yet it is possible to plant too many trees ; to plant them too near the building, or to spoil the effect by wrong location. The school premises should resemble a picture, the building near the center surrounded by open spaces bordered by trees and banks of shrubbery, or tall flowering plants. With the exception of the row lining the street in front, most of the trees should be grouped in the remoter portions of the grounds. In irregular masses about the border, care being taken to keep the taller in the rear, may be planted, lilacs and forsythias, syringas, spiræas, weigelias, and japonicas, flowering almonds, althea, hydrangea, and deutzia, and flowering currants. A few scattering shrubs will not suffice. They should be planted close enough to produce mass effects. A portion of the outskirts of the grounds should be set apart for hardy border plants, perennials that once

established will hold their own with little attention. Peonies, dicentras, aquilegias, phloxes, lilies, irises, and coreopsis, hollyhocks, and rudbeckia will maintain a succession of bloom all summer long about the empty school house. The greater part of the garden must be devoted to annuals and experimental beds. Yet even these should be arranged with reference to general effect as viewed from the front. Strong growers with rank foliage, cannas, sunflowers, castor beans, must stand well to the margin. Tall spikes of flowers upon comparatively naked stems like the amaranth and gladiolus may stand well in the foreground. Generally more pleasing effects are secured by massing each variety, rather than by scattering them among different species,

In beginning a school garden most of the planting must be done in the spring, yet there is much to do in the fall. The plan should be carefully worked out, the sod broken up, and the ground partially prepared for the spring planting. Seeds may be gathered or ordered early from some reliable seedsman. After the garden is once established the gathering and labeling of seeds will receive conspicuous attention.

A few bulbs, crocuses, tulips, hyacinths, should be planted for early spring flowering. The ground should be thoroughly pulverized to a good depth. The bulbs may be planted at any time before November 15. September plantings usually yield best results. The teacher should secure a few four-inch pots and instruct the pupils in the mode of preparing hyacinths and narcissi for winter flowering. Unless the school house boasts of a cellar which does not freeze, it will be necessary to take these to the homes of the pupils for development.

In the fall, too, many seeds should be planted—peach pits to be budded in the following September, apple seeds to produce stocks for grafting, and especially nuts and acorns, whether it is desired merely to study their mode of germination, or to grow trees. These trees with long tap-roots do not bear transplanting well. In many parts of the middle west, nut trees are growing scarce. Walnuts, butternuts and shell-bark hickories should be planted abundantly along roadsides, whenever the soil is suitable. As far north as the forty-first parallel in rich soils the pecan is pre-

eminently the tree to plant ; it is a vigorous grower, clean-limbed, symmetrical, and beautiful ; and at the present prices of the nuts no field or orchard crop can yield a better return for the ground it occupies. If nuts of northern growth are planted, the trees will yield abundantly and the crop will mature.

In the fall months the teacher will start a window garden in pots and window boxes in the south windows of her schoolroom, not so much as an end in itself as a means of instructing the children in the care of their own houseplants. The lessons should deal with such questions as these: the proper admixture of loam and sand or leaf-mold for different species; the use of broken brick or fragments of pottery to insure proper drainage ; how often and how freely plants should be watered ; the various modes of repotting plants of different ages ; the varying amount of sunlight required by different plants ; showering or bathing plants to free them from the dust of the schoolroom ; how to destroy the red spiders, the green lice, the scales and mealy bug, that infest houseplants ; how to propagate petunias, geraniums, salvias, and coleuses by cuttings. The varieties chosen for the schoolroom must depend upon the exposure, the mode of heating the building, and to some extent upon the age of the pupils instructed. In rural schools it will be necessary to carry them all to the homes of the pupils by the end of November. The dust and extremes of temperature that usually prevail in city schools suggest that even for them only vigorous and hardy species be selected. Geraniums, salvias, lantanas, ageratum, and heliotrope grow freely and bloom abundantly with any sort of treatment. A large pot of double white petunias will fill the air with fragrance. These are all readily propagated by cuttings. A Chinese primrose may be bought of the florist. Bulbs of the pink oxalis may be started at almost any season and will bloom profusely. A basket of asparagus sprengerii should hang before the window. Kenilworth ivy may be substituted at a north window. Begonias and sword ferns may be kept in rooms where direct sunlight never enters.

In March the teacher may place in the south or east windows a few shallow starting boxes for annuals. Asters, calliopsis,

petunias, phloxes, zinnias, and salvias, will be ready for transplanting to the school garden or to the private gardens of the pupils early in May. The inexperienced teacher must be prepared for failure in this work. Poor seed, wrong temperature, too much or too little water, earth worms that devour the young seedlings, the "damps" that may cause a flourishing plantation to vanish in a few hours, are only part of the difficulties that vex the soul of the amateur florist.

At this time, when the warming sunshine develops every latent interest in plant life, the pupils should make an experimental study of germination to discover the conditions of light, heat, and moisture most favorable to different plants. Our recent text-books in botany describe experiments of this character, as well as numerous simple devices for illustrating the effects of drainage, the value of a dust mulch in retaining soil moisture, the importance of soluble nitrates to the growing plant. There is no rural school so unhappily conditioned as to render all of this work impracticable. Nothing else is so potent in awakening an interest in scientific agriculture, for nothing else so clearly reveals man's power to alter and control the vital conditions of plant development.

Early in April, or as soon as the ground is dry enough, spring work in the school garden may begin. The border of shrubs and hardy perennials must be planted before the buds start. Sweet peas are planted, soon to be followed by nasturtiums, and after May 1, by poppies, escholtzia, balsams, marigolds, amaranths, verbenas, portulacca, sweet alyssum, and other annuals. Pupils will bring in from the woods anemones, spring beauties, blue bells, painted cup, trilliums, violets, and spiderwort. When in full flower is not the best time to transplant; yet these may be kept alive with some care, if enough soil is carried with the roots. In rural and village schools it is not best to give much space in the school garden to ordinary field crops and garden vegetables. A few radishes may be sown to show the effect of topping the leaves upon root development. Peanuts, cotton, okra, mimosas, and other unfamiliar plants of peculiar habits of growth or high commercial importance may properly find a space.

Children may be instructed in the care of tools and in the operations of transplanting, hoeing, and weeding; they may be shown the conditions under which a clay soil may be properly worked and the need of maintaining a soil mulch during dry weather. If the space is ample it is well to charge each pupil with the care of some portion of the garden under the direction of the teacher; but he should not plant as he pleases, nor assert exclusive property in the plot assigned, nor lose his sense of joint ownership in the whole garden. In the home garden there will be opportunity for spontaneity.

The unskilled teacher in search of information will derive great benefit from the study of the seed catalogues of our leading florists. The writer has always found florists a very pleasant class of men to cultivate. They are invariably men of superior intelligence, so devoted to their profession that they are willing to make no small sacrifice of time and means in the promotion of any enterprise that promises to foster the love of flowers. The best books which the writer has read are: *Flowers*, by Eben Rexford (published by Penn Publishing Co.), 50 cents. *The Nursery Book*, L. H. Bailey (The Macmillan Co.), $1.00. *Garden Making*, L. H. Bailey (The Macmillan Co.), $1.00.

DAVID FELMLEY.

ILLINOIS STATE NORMAL UNIVERSITY.

SOME STEPS IN THE EVOLUTION OF SOCIAL OCCUPATIONS.

PRINCIPLES OF SELECTION.

No IDEA has attracted greater attention in the educational world during the last ten years than that of motor activity. Several influences have conspired to this end. Modern research in psychological laboratories, improved methods of child-study, the development of the scientific method, and the revolution in industrial processes, all have united in focusing attention upon this question. No subject appears more frequently on educational programs, or calls forth a more vigorous discussion. Already there is a considerable literature bearing upon this subject.

Nor does the interest aroused in motor activity expend itself merely in a consideration of the more theoretical aspects of the subject. Educational theories are being brought to a practical test in elementary schools and in laboratories associated with the educational departments of our great universities. A marked change is noticeable in the attitude of teachers in the public schools. Everywhere there is manifest a lively interest in some phase of the subject.

If the child were merely a mechanism, the manner of setting up the activity would be comparatively unimportant. The main point would be to secure the activity. But the child is much more than a mechanism. Mind and body are most intimately related. Heart, head, and hand have a place in each educative act.

Exercises in motor activity, then, to be educative in the highest sense, must be something more than motor activities. They must be a phase of experience which calls into play the entire organism. In their outcome they must represent something of real social value. The use of practical activity as a means of affording the child an all-round experience in the processes of society is justified by the experience of every household as well

as by that of every race. The idea finds support also in the latest results of the research of the physician, the psychologist, the educational philosopher, and the sociologist.

The elementary school is thus preëminently an experience stage. Even when the child does not come under the influence of the school at this time, he spontaneously enlarges and reconstructs his experience. It is the function of the school to facilitate this process. The school should establish such conditions as to enable the child to escape many of the blunders of mankind, and to direct his energies in such a way as to acquire, in a few short years, an experience that represents, as far as he is able to experience, the highest achievements of his race.

What, then, are the experiences that shall furnish materials for enriching the spontaneous activities of the child? What test shall be applied in the selection of such materials? The claims of the individual require that the activities selected should be such as to secure an all-round development. The claims of society require that they should in their outcome, at least, represent something of social value. The individual test is found in the attitudes of the child and in his power of muscular control. The social test is found in the significance of the activity with reference to the society in which he lives.

In applying the individual test it is essential that the use of the generalized results of the study of the stages of development be supplemented by an accurate knowledge of the particular child. This knowledge should include such information as the parents and the physician can furnish, as well as that obtained by careful observation of the child at play, and by such tests of the senses and the power of muscular control as are made by specialists in child study. When these steps have been taken, when a reasonably fair knowledge of the attitudes of the child and his possibilities in the way of control is attained, the subject matter should be examined in order to discover whether it can furnish materials suited to the child's attitudes, and whether the most essential activities involved in the experiences that it embodies represent a technique over which the child may be expected to gain control.

In applying the social test the subject-matter is viewed from another point of view. It is examined now with reference to its social significance. At this time it is necessary to recognize not merely the universal needs which characterise mankind, but those needs which are due to differences in race, in language, and in social origin.

If such tests are applied to a sufficient variety of racial experiences to correspond to the variety in the dawning attitudes of the child, a course of study can be constructed that will satisfy the demands of the individual for an all-round development, and of society for varied service. But if the principle of balance is lost sight of, if instead of making use of this plastic period for grafting a great variety of social habits upon the inherited instincts and impulses, the time is devoted to the mastery of only a few activities, development will be arrested. It is important that attention be given to securing not merely suitable activities, but a suitable variety. The acquisition of special skill and the formulation of intellectual truth may well be postponed until the child shows some evidence of a muscular control and an intellectual interest that will warrant such a direction of his efforts as will secure those results.

Were the principle not violated so frequently, it would seem to be unnecessary to call attention to the demand of the child for the completion of a situation. The child is more of a philosopher than he is usually given credit for being. His philosophy is none the less philosophy because it has not been translated into intellectual terms. The simplicity of the child's philosophy corresponds to the simplicity of the situations of which he is able to take cognizance, and the simplicity of the processes over which he can exercise control. As long as his problems are simple and direct, his spontaneous activities should be developed by the use of racial experiences of a similar type. At this time there is little danger of violating the principle that demands completeness. But when the child is able to conceive of the product of his activity as separate from the process, when he is able to order his activities with reference to more indirect and complicated modes of securing the result, the situation

becomes more complex. The danger arises when *fragments oj experience* are used as the subject-matter, the child being compelled to occupy his time with partial activities instead of being given the opportunity to complete the entire circuit.

Until the child has had sufficient first-hand experience to enable him to interpret its symbols, he should be given the opportunity to participate in the whole round of activities which includes the methods of procuring the raw materials, the processes of manufacturing the same, and the modes of distribution and exchange involved in bringing the product to the person who consumes it.

Genuine simplicity is never opposed to comprehensiveness. Methods which attempt to simplify by the use of isolated fragments of experience defeat their own purpose. Such methods have arisen from a partial knowledge of the child, and from misconceptions that arise from the use of technical terms under circumstances which demand their translation into more popular language.

Tested by the requirements of the individual claim, all modern industrial processes with the exception of agriculture and domestic service, which are belated forms and still remain in a comparatively simple state, must be denied admittance into the course of study until the child is able to interpret the symbols of experience. Modern industrial processes are too complex for the child to control. They represent a technique entirely beyond his power to appreciate unless he can approach it from its more simple forms. They make demands for an impersonal, non-invidious interest which is one of the highest products of our civilization, In the case of agriculture and domestic service the situation is different. There is much in the modern processes of both which may be used to advantage throughout the entire period.

Viewed in the light of the social claim, modern industries are most significant. They represent the vital forces by means of which all social institutions are preserved. Nothing can be more significant to the individual who is able to control their processes than the industries that characterize the present age.

Their place in our educational institutions is only beginning to be realized. That they occupy so small a place in the education of the child is due to conditions inherent in the situation.

Agriculture and domestic service, although of great value, do not cover the entire field. There is need of supplementing these processes by the introduction of other varieties of industry. Certain phases of modern complicated processes are sufficiently simple for the child to master, but since they fail to meet the demand of the child for completeness, they should not be introduced until a time when the conditions are such that they supply a genuine need.

It is possible to select from the experiences of contemporary peoples activities which correspond to the successive stages in the development of the child. Tested by the individual claim, such materials fail only in respect to this: they are more apt to represent static than dynamic conceptions. Almost inevitably the study of such activities becomes a consideration of processes now in vogue, rather than of ways of inventing new methods. Yet if such materials should meet the requirements imposed by the remaining tests, it might be possible to overcome this difficulty.

It is when the social test is applied, that such materials are seen in their true place. In so far as the experiences selected from the life of modern savage and barbarous peoples represent universal experiences of mankind, they are of value. In so far as they represent that which is significant, chiefly on account of conditions peculiar to the development of a given people, they should be accepted only when they have a significance in relation to the evolution of the social institutions that characterize the society to whose service the school is devoted.

When the main lines in the development of one's own institutions are well understood, a comparison of some of their features with those of the institutions of other people may be valuable, but until such a basis is laid, it is not to the modern savage that we must look for experiences suitable to enrich those of the child of today. Such experiences do not embody the traditions of our people. They do not pave the way to an

understanding of civilized processes. They present savagery and barbarism at their very worst, for in many cases they represent an arrested development.

Judged by all of the claims here presented, no materials seem so well entitled to a place in the course of study for the early grades of the elementary school as those which represent the traditions of our forefathers. The records of the early Aryan peoples are meager, but the results of modern research have enabled us to mark out the main lines. A generalized view of the early progress of the race, which it is thus possible to present, is more significant for educational purposes than a more detailed account would be. It serves to accentuate the significant steps in the upward movement of the race, and to leave unnoticed a multitude of experiences of which the child has no need.

In early childhood, typical experiences of Aryan peoples, selected with reference to their value as affording an insight into more complicated processes in the line of our own development, and arranged with reference to a careful gradation in the technique of the processes represented, can best satisfy both the individual and the social claims. They meet the demand for both variety and completeness. When they have fulfilled their purpose, they should give way to that which can give good evidence of its right to the place.

The early experiences of our forefathers are of inestimable value. They reveal the method of human life. They embody great achievements of our race. They show the real kinship of national types. A discovery of the fact that the different nationalities that are united in this country under one government, sprang originally from the same parent stock, and lived together for thousands of years, is of value with reference to one of our most pressing social problems. The assimilation of the great number of foreigners that come to make their homes with us each year, presents a problem that can be solved only when we cease to regard them as foreigners. Until such misconceptions are corrected, we cannot be a united people.

We need the light of our early traditions. No people stands

in so great a need of this as our own. It is to the public school that we must look to supply this need. The child, in his earliest years, can be taught those fundamental truths which will enable him to see our nation in a proper perspective. The conception of a common origin can be so used in the school as to develop in the child a greater respect for his neighbor, who is different in some respects from himself, and a greater sense of social obligations than is now apparent. The experiences of other races may not be excluded altogether from the course of study, but they should by no means occupy the most prominent place.

The conception that manual training means work with tools, is largely responsible for the present situation in primary grades. The recognition of the fact that the period of the *tool* is preceded by that of the *hand*, and that the child needs numerous opportunities to come into direct contact with raw materials without the intervention of tools, will remove one cause of the present difficulty. The introduction of tool work by means of well-graded steps in keeping with the development of the child's power of muscular control, finds support in the race parallel. Such a careful gradation is essential alike to a normal growth of the child, and to a well-graded curriculum.

When the curriculum is viewed merely as a means of enabling the child to acquire a more valuable experience than he could gain if left to his own resources, it assumes its proper place. In itself, it has no life, no unity. The principle that gives it unity is found, on the one hand, in the *life of the individual* to whose service it is devoted, and on the other, in the *life of the race* whose experience it embodies.

In the primary grades the child's interests are only beginning to differentiate. No necessity is felt for a distinct recognition of the elements that are there. Different phases of the same subject-matter afford the child ample opportunity to acquire all the history, the science, and the art that he is able to appreciate at the time. It is only when he begins to reconstruct his experience with reference to satisfying the claims of some interest that is beginning to stand out from the rest, that it becomes necessary to arrange the subject-matter with reference to this

need. At this time it is desirable to *review* past experiences with reference to forming distinct sequences which shall correspond to the separation that is beginning to be made in the child's interests. These sequences, which comprise phases of the child's personal experience, enriched and clarified by the use of the experience of the race, may be still further enriched and extended by the addition of other steps that are new to the child.

The attention that the child gives to the formation of these sequences, is confined more strictly to the method of advance than it was when he was concerned with the more generalized view. It corresponds more closely to the scientific attitude of mind. Sequences thus formed are invaluable as a means of enabling the child of intermediate and grammar grades to maintain organic relations between manual training in its broadest sense, and the most fundamental steps in the evolution of the sciences and the arts. Their relation to history, the racial experience which the child has already incorporated as a part of his own, is evident; for that is the source from which the sequences have been derived.

The series of articles of which this is the first, will be devoted to supplying teachers with much needed materials which have not yet been rendered available for general use. The attention of teachers is, therefore, invited not to theoretical questions, nor to a detailed treatment adapted to the use of the child, but to the formation of sequences which represent the most essential steps in the evolution of the processes which supply our most permanent needs.

The grouping of these sequences about the needs of food, clothing, and shelter, conforms to the division that is made in the practical activities of the school. It is hoped that these materials will prove to be of value to teachers of domestic science, the textile arts, and manual training, as well as to teachers whose interest is in the more general work of the school. Many of the processes presented are so simple as to be readily incorporated into the work of schools that have no special equipment for manual work.

In connection with the food process, such activities as are represented in the evolution of the methods of obtaining, of preparing, of serving, of carrying, of preserving, and of storing food, will be explained and illustrated. Processes involved in the evolution of cooking utensils, fireplaces, chimneys, ovens, and mills for crushing and grinding food, will also be treated.

It will be necessary, at times, in determining the place of a given activity, to apply the principles set forth in this article. The method of treatment recommended in the use of the materials presented, will be determined as much by the *differences* that appear in the attitudes, and in the natural and social environment of the child and of the race at a given stage of culture, as by the points of resemblance. In this way, it is hoped that it may be possible to avoid mistakes that might otherwise occur in dealing with a subject so new and yet so old.

KATHARINE E. DOPP.

THE UNIVERSITY OF CHICAGO.

GEOGRAPHY.

II.

ZONIA BABER.

FIRST GRADE.

WINTER QUARTER.

I. Lake Michigan: change produced by cold; ice harvest.

II. Houses: building, heating, lighting, food. Visit South Park conservatory — moisture; temperature; tropic fruits — bananas, oranges, limes, grape fruits, figs, dates — appearance when growing; harvesting.

III. Eskimo: home; provisions for warmth in winter; food. Life of Eskimo child.

SPRING QUARTER.

I. Garden-making: soil — best soil for garden; necessity of moisture; weeding.

II. Farm: visit farm. Spring activities — preparation of ground for planting; seeding; cultivation.

III. Home: necessities of a summer home; build a Yucatan wattled house for summer playhouse.

REFERENCES: King, *The Soil;* Gaye, *The Great World Farm;* Schwatka, *Children of the Cold;* Nansen, *First Crossing of Greenland;* Peary, *Northward over the Great Ice.*

SECOND GRADE.

WINTER QUARTER.

I. A study of prairies, semi-deserts, deserts. (1) Prairies — appearance at different seasons; grazing animals — cattle, sheep, horses, goats; life of herdsman. (2) Desert — appearance: rocky, sandy, sand dunes, oases; camels; caravans. Life in desert.

II. Winter effect on Lake Michigan; on rivers, swamp, prairie, garden.

REFERENCES: (1) Ratzel, *Agriculture and Cattle Breeding;* Marsh, "Deserts," *Man and Nature;* Gay, "Deserts," *Great World Farm;* Johnston, "Deserts," *Compendium of Africa;* Van Dyke, *The Desert;* Davis, "Deserts." *Physical Geography.*

SPRING QUARTER.

I. Agriculture: visit farm. (1) Gardening — plant, indoors, cotton, rice at time of seeding in southern United States; make garden. (2) Farm — removing remains of previous crop; plowing; harrowing; seeding.

II. Transportation: means by which we receive materials from distance. Visit car shops; boats. (1) On land — railroads; wagons, sleds, drawn by

horses, mules, cattle, camels, dogs, reindeer, buffaloes; by pack — the above animals, also llama, elephant, man.

REFERENCES: (I) See first-grade outline.

(II) Cooley, *Transportation;* S. M. Shaler, "Beasts of Burden," *Scribner*, July–December, 1894; "Roads, Streets, and Vehicles," *Iconographic Dictionary*.

THIRD GRADE.

WINTER QUARTER.

I. Conditions for farming in a river valley: Pupils make river valley in the laboratory. Flood plain — effect of overflow of river on soil; on crops; protection against floods; building of levees; drainage — ditch, tile.

II. Conditions for farming in semi-deserts or deserts: (1) Irrigation: source of water supply — wells, rivers, reservoirs; means of conveying water to the crop. Pupils make model field showing irrigation.

REFERENCES: Davis, *Physical Geography;* Gilbert & Brigham, *Introduction to Physical Geography;* Mill, *Realm of Nature, International Geography;* Marsh, *Nature and Man; Year-Book of the Department of Agriculture*, 1895; King, "Irrigation," *The Soil;* Murray, "Irrigation in Egypt," *Handbook of Egypt*.

SPRING QUARTER.

I. Conditions for farming in mountains: (1) Slope — difficulties of retaining soil and moisture on steep slopes; terraces. (2) Climate in high mountains — temperature and moisture. (3) Vineyards on mountain slopes. Pupils plant grapes in garden; tending of vineyards; harvesting of grapes; wine-making. (4) Tea on slopes of Himalaya and in Ceylon — planting; tending; picking and drying tea. (5) Coffee — planting, cultivation, harvest. (6) Life of mountain people.

II. Plant in garden cereals and vegetables — in sandy soil; in gravelly soil; in clayey soil. Give each soil same amount of water — result. Remove weeds from a part, let weeds grow in other parts — effect. Best location for farmers — soil, moisture, heat, plant and animal conditions.

REFERENCES: Dodge, *A Reader in Physical Geography;* Blackie, *Tropical Readers*, 1 and 2; "Tropic Products," *Handbook of Information, Jamaica*, 1901; "Tea," "Coffee," "Grape," *Universal Encyclopædia*.

FOURTH GRADE.

WINTER QUARTER.

I. Building of streets, houses, bridges. (1) Streets: width; length; material used in paving — wood, stone, brick, asphalt, concrete, source of paving material. Visit streets which are being paved in the various ways; (2) Houses: visit houses which are building; source of material: (*a*) stone: kinds used — limestone, sandstone, granite, green stone, marble, quartzite; quarrying and dressing stone; (*b*) wood: visit lumber yards; kinds of wood

used in house-building; lumbering — felling trees; logging; sawing; lumbering in Michigan; in Burmah; in Brazil; (*c*) iron: mining; smelting; visit foundries at South Chicago; (*d*) bricks: visit brick yard at Purington; material used in brick; manner of manufacture.

REFERENCES: Annual Reports of the Department of Public Works of Chicago; *Universal Encyclopædia;* Diller, "Rock Specimens," *U. S. Geol. Sur. Educational Series; Iconographic Encyclopædia.*

SPRING QUARTER.

I. Water supply of Chicago: visit crib and pumping station, also where basements are digging which reach ground water. Water tunnels; manner of construction. (1) Springs, wells, rivers, as sources of water supply: (*a*) springs: formation; kinds of — hot springs, cold springs, mineral springs; source of water; (*b*) wells: common and artesian; modes of well-making; source of water; (*c*) rivers: source of water; uses.

II. Clothing: sources of materials: (1) Cotton: plant in school garden. Best conditions for growth; cotton culture in southern United States; picture life on cotton plantation. (2) Wool: visit Stock Yards for sheep and wool; picture life on sheep ranch; sheep-shearing and preparation of wool for cloth. (3) Silk: raise silk worms in schoolroom. Best conditions for growth of silk worms. Stories of silk culture in China and Japan. (4) Flax: pupils plant flax in garden. Flax culture: preparation for linen — pulling, threshing, retting, breaking, scutching, hatcheling. (5) Fur: conditions which necessitate fur for animal covering. Principal furs of commerce. Visit fur store. Countries which produce most furs. Preparation of furs for use. (6) Leather: kinds of leather used for clothing; means of preparation for use. Visit tannery.

REFERENCES: Adams, *Commercial Geography; Universal Encyclopædia;* Annual Reports of the Department of Public Works of Chicago; Davis, *Physical Geography;* Tarr, *Physical Geography;* Gilbert & Brigham, *Physical Geography;* Dryer, *Physical Geography.*

FIFTH GRADE.

WINTER QUARTER.

I. Drainage of North America: river basins; river systems. Special study of important river basins — Mississippi river basin, St. Lawrence river basin, Atlantic system of river basins, Colorado river basin, Yukon river basin, Mackenzie river basin, Saskatchewan river basin; position, extent, climate, products; influence upon topography; influence upon industrial pursuits of the region. Probable future if diastrophic conditions remain static.

II. Climatic condition of North America: relation to topography; to oceans; to latitude. Climate a cultural control; climatic conditions of Chicago. Pupils keep record of sun's apparent movements; temperature, rainfall, direction of winds.

REFERENCES: Mill, *International Geography;* Longmans, *School Atlas; Compendium of North America;* Reclus, "North America;" *Earth and its Inhabitants,* Shaler, *United States;* Shaler, *Story of Our Continent; National Geographic Monographs;* Davis, *Physical Geography;* Russell, *Rivers of North America;* Russell, *Lakes of North America;* Tarr and McMurray, *North America;* Shaler, *Nature and Man in America.*

SPRING QUARTER.

I. Glaciers and their effects: visit Barrington; north shore; Stony Island; Purington. (1) Result of glaciers in this region; effect on industrial conditions. (2) Distribution of existing glaciers of North America; work done and doing. (3) Continental glaciers of North America; extent; effect upon area covered; effect of continental glacier upon the cultural development of North America.

II. Distribution of some leading industries of North America: (1) Agricultural areas: regions best adapted to the production of wheat, oats, corn, barley, rice, sugar cane, sugar beets, cotton, flax, tobacco, fruits. Why? Visit farm. (2) Stock-raising: regions best adapted to raising cattle, horses, sheep, hogs, goats. Why? Visit Stock Yards. (3) Lumbering: visit lumber yards; distribution of hard-wood forests; of soft-wood forests. Lumbering in Central America; in Michigan; in Maine; on Pacific coast. Future of the lumbering industry. (4) Mining: distribution of iron, coal, copper, gold, silver, lead, tin; other metals. Reasons for concentration of metals or minerals; mining processes. Visit mills at South Chicago, Field Columbian Museum.

III. Distribution of political divisions; of cities: (1) Position and extent of Canada, United States, Mexico, Central America, West Indies, Greenland: (*a*) most important products of each country; (*b*) people — language, dress, customs; (*c*) cities — distribution of most important cities; reasons for location and importance: effect of waterways, mountains, native products; political reasons.

REFERENCES: See reference for winter quarter; Shaler and Davis, *Glaciers;* Russell, "Glaciers of North America," *Journal of Geology,* Vols. I–IV; Salisbury, *Physical Geography of New Jersey;* Scott, *Introduction to Geology;* Sievers, *America;* Shaler, *United States of America;* Dawson, *Canada and Newfoundland;* Parkin, *The Great Dominion; British Association Handbook of Canada;* Bancroft, *Resources and Development of Mexico;* Romero, *Geographic and Statistic Notes of Mexico;* Belt, *Naturalist in Nicaragua;* Brigham, *Guatemala, the Land of the Quetzal.*

SIXTH GRADE.

WINTER QUARTER.

Eurasia in connection with a study of history and current events.

I. Eurasia — terrestrial position; size; shape; influence of massiveness. (1) Highlands — plateaus, mountains. (2) Lowlands — position in relation

to highlands; in relation to climatic conditions; in relation to open oceans. (3) Drainage—ocean systems, inland systems; effect of each on the life-development of the areas. (4) Climate—prevailing winds; temperature; rainfall; influence of size, massiveness, and topography of continent on climatic conditions. (5) Europe—position in relation to remainder of continent; topography, drainage, climate. Influence of indented coast line; cause; compare with North American coast line. Mountains and plateaus; influence of position of mountain ranges upon climate and cultural development of northern and southern Europe. Plains; influence upon cultural development. Balkan peninsula: location, topography—Balkan mountains, Dinaric Alps, Thraco-Macedonian highlands; plains—drainage; climate. Greece: coast line, effect on people; surface, soil; climate; products; cities; people. Switzerland: position; influence on remainder of Europe; highlands—Jura zone, Swiss plateau, Alps; influence upon drainage—Rhine river, Rhone river, Danube river; climate—compare north and south side of mountains, winter and summer; wind, rain- and snowfall; products; scenic attraction. European plain—extent; drainage; climate; products.

Special study of the Netherlands: location, altitude, protection of land below sea level; drainage—Rhine river, Wâal river, Lek river; influence of rivers and canals upon commercial development. Coast, sand dunes—use, means of retaining dunes. Natural products. Climate; influence of low altitude upon climate; influence of North Sea; rainfall upon polders or reclaimed land; upon higher land. Cities—appearance, location. Present government.

REFERENCES: Mill, *International Geography;* Keane, *Compendium of Asia, Compendium of Europe;* Reclus, "Europe and Asia, "*Earth and its Inhabitants;* Lubbock, *Scenery of Switzerland;* Sven Hedin, *Through Asia.*

SPRING QUARTER.

I. Asia—relation to Europe; topography; climate. Influence of the Orient upon international relations. Special study of China, Japan, Corea, India. For detail outline, with reading references, see COURSE OF STUDY, *Chicago Institute,* May and June, 1900.

SEVENTH GRADE.

SPRING QUARTER.

North America and South America.

I. Western continent—size; shape; influence of shape upon its cultural development; topography—mountains, plains, plateaus; if American Mediterranean were land, effect upon life-development; if the high ranges of mountains were on the eastern side of the continent, effect upon life and culture. (1) North America—simple story of the evolution of the continent. (2) South America—location; area; altitude, compare with Africa; physical

features: Andes mountains, Guiana highlands, Brazilian highlands, central plain; river basins—Amazon, La Plata, Orinoco, Magdelena, Atrato, Guiana system; Patagonian system; as a system of water highways compare with other continents; climate—temperature, compare with Africa; prevailing winds; rainfall, compare distribution of rainfall with other continents; account for small desert area; native product; distribution of forests, prairies; culture products; distribution of political divisions, account for large number of small republics; probable difference in development had English instead of Spanish and Portuguese colonized South America; distribution of cities.

REFERENCES: Mill, *International Geography;* Keane, "South America," *Stanford's Compendium;* Reclus, *Nouvelle géographie universelle;* Humboldt, *Travels to the Equinoctial Regions of the New Continent from 1797 to 1804;* Ball, *Notes of a Naturalist in South America;* Markham, *Peru;* Hudson, *The Naturalist on the La Plata; Handbook of Uruguay* (Bureau of American Republics); *Handbook of Paraguay* (Bureau of American Republics); Agassiz, *A Journey in Brazil;* Bates, *A Naturalist on the River Amazon;* Wallace, *Travels on the Amazon and Rio Negro;* Rodway, *In the Guiana Forest;* Strickland, *Document and Maps of the Boundary Question between Venezuela and British Guiana.*

II. Mathematical geography—general relation of sun and earth causing change of seasons.

REFERENCES: Jackson, *Astronomical Geography;* Young, *General Astronomy;* Huxley, *Physiography;* Gregory, *Elements of Physiography.*

SPRING QUARTER.

I. Forests—distribution of forest areas of the earth; influence of forest upon the development of a country in temperate and tropic regions. Value of present forests, industrial and climatic; probable future of forest areas.

II. Agriculture—distribution of lands best adapted to farming; location of cereal belts; sugar cane; coffee; tea; tobacco; cotton. Account for location of the special crops—the geographic and human controls.

III. Stock-raising—distribution of areas best adapted to stock-raising; cause.

IV. Distribution of political divisions—nations important in international affairs; large land owners; England, Russia, China.

V. Distribution of leading cities. Account for location.

EIGHTH GRADE.

SPRING QUARTER.

I. Forests—distribution of forest areas of the earth. (1) Lumber: foremost wood-producing countries: United States, Canada, and Russia. Why? Place occupied by pine, oak, walnut, maple, chestnut, beech, ash, poplar, as useful woods. Other important woods: mahogany, teak, ebony,

bamboo, eucalyptus. Where produced? Special use? Modes of lumbering in cold countries; value of rivers, of snow. (2) Other products of forests —tar, turpentine, resin, rubber, quinine, gutta-percha, dyestuffs, camphor, cork; where, from what, and how produced? Value of forests in the development of a country in the temperate and tropic regions. Value and manner of re-foresting. Influence of deforestation; countries most affected by deforesting. Probable future of the present great forest areas. Comparative place of forestry in the world's industries.

II. Agriculture — distribution of lands best adapted to farming. Leading cereal crops — location; why? Manner of cultivation and disposition. Sugar cane: areas now employed in cane raising; why decreasing? Sugar beets: distribution of areas adapted to beet culture; areas now used for beet growing. Coffee: distribution of; cause of present over-production; result of coffee congress; coffee-drinking countries. Distribution of tea plantations; cultural methods; tea-drinking countries. Cacao: culture and distribution; chocolate consuming countries. Value of coffee, tea, chocolate as as a social factor. Cotton: limit of distribution; why? Method of culture and disposition of crop in United States, India, Egypt. Tobacco culture. What elements enter into the geographic and human controls in the distribution and disposition of various crops.

III. Stock-raising — distribution of areas best adapted to stock-raising; regions where stock-raising now prevails; why? Cattle: motive governing production in United States; in India; in Argentine; in South Africa. Sheep: distribution of; fight between cattle and sheep herders in the western United States. Australia, Argentine, New Zealand, South Africa, Russia, as sheep-producing countries. Influence of refrigerator cars and refrigerator ships upon production of sheep, cattle, and swine. Distribution of swine; horses.

IV. Distribution of political divisions: Nations important in international affairs; why? Large land owners: England, Russia, China, United States; why? Relative value of distribution of a nation's land; compare England's and Russia's possessions. Special study of the great land-owning nations; geographic and political importance; account for material and human assets.

V. Distribution of leading cities of the world; account for position and importance; probable future.

REFERENCES: Mill, *International Geography;* Shaler, *Nature and Man in North America;* Ratzel, *Politische Geographie;* March, *Man and Nature, or Physical Geography as Modified by Human Action;* Adams, *Commercial Geography;* Chisholme, *Handbook of Commercial Geography;* Keltie, *Applied Geography;* Mill, *Elementary Commercial Geography*; Stanford, *Compendium of the Different Continents.*

KINDERGARTEN OUTLINE FOR OCTOBER, NOVEMBER, AND DECEMBER.

ANNE ELIZABETH ALLEN.

THE content of the mind of a child of three years is apt to be a mass of heterogeneous images behind an "I want" column of indefinite length. This "I want" soon develops into "I want to know" or "Why?" and then the problems of the teacher as well as parent begin.

How much to answer and how much may be left to be found out by the child himself; how one may best make of himself an appendix merely for reference after the young knowledge seeker has exhausted his resources; and how to know what are "the best conditions for his growth"—are the questions open to us. Occasionally one or more of these questions is answered in individual cases, but they are always open questions, and the answers need constant revision.

True comradeship with children, constantly studying them as a companion in their many vagaries and from all sides, seems to be one of the best ways to understand and help them. The temptation in our present education seems to be to overstimulate them, and try to propose the question a mature mind naturally asks instead of waiting for the problem to formulate itself into a question in their minds; to overstimulate an already intensely active body and to force a moral condition that the teacher himself is only just beginning to comprehend.

At this keenly intellectual period little or no stimulation is required, and the teacher or parent need only direct. Questions come only too fast as all know who have been much with little children.

The "interests of children," about which so much has been written by the child students of the day, while embracing with all children many fundamental and universal things, especially in earliest childhood, are at the same time, in different localities

and among different classes and nationalities, of very varying quantity and quality.

As the child grows older, these interests take on a more local coloring and bear, in many instances, a strong resemblance to those of his parents and closest friends. The son of a street-car conductor, engineer, street cleaner, or bricklayer aspires to these several occupations usually as unquestionably as the daughter of a household seizes upon some or all of the home industries she sees her mother engaged in.

The mind of a little child flits from interest to interest, from whim to whim, fortunately for him; and do we not sometimes forget the more fundamental interests and in unguarded moments follow too closely the more evanescent whims? Again, do we not follow *ad nauseam* the fundamentals and leave out the real appeal to his spontaneity and check genuine expression?

Humor seems to have been sadly overlooked in our education. Jokes are reserved for mature minds, and in our language are so broad many times as to be dreaded. Fun of any kind has been so long tabooed from the sacred precincts of the temples of learning that a pedagogue fears its approach as he would that of some unconquered and unconquerable monster. Yet it is the essence, the spice of childhood. Were our children educated more in this direction, would not the humor of our language become more refined and acquire a *finesse* now rarely known? Neidlinger, in his *Songs for Little Children*, has touched the keynote of the nonsense that children love, and Andrew Lang, Frank Baum, and others have supplemented time-honored "Mother Goose" in a way that encourages us to hope for better things yet to come.

A good, hearty laugh is a tonic for a whole day, and nothing makes for better comradeship between old and young. We forget that the smile was rather a late development in art, and that the appreciation of humor denotes a high degree of civilization.

The decision as to what materials to put into the hands of kindergarten children has undergone many modifications since the modern psychologists have turned their attention to its con-

sideration. Froebel, in his marvelous insight into child nature, has left us a legacy beyond price. Yet more recent investigation has thrown new light upon some of his wonderful discoveries and modified his conclusions to meet the wisdom of this, the twentieth century. We are learning to make use of and modify his tools with all their possibilities and take them from the altars where blind worshipers of the letter have sought to elevate them. We are learning truly to follow the children in their real interests, although many times blindly and falteringly, and let us hope questioningly. There should be no abrupt change between the kindergarten and first grade any more than between any other two grades of the school. There should be no isolation. The kindergarten should be considered a regular grade of the school and treated as such. When this is done we shall lose much, let us hope, of the fetichism now existing in our kindergartens and study the children more and the material with which we work a little less.

In the fall the children come to us fresh from their summer outing, where their liberty has in most cases been unrestrained; hence they should be confined indoors very little. Those who have been in the country are prepared to question the miracle of change going on outdoors. We, with our two adjacent parks, have ample opportunity, weather permitting, for spending much of our time amidst the most delightful surroundings. During October we shall plan to stay in the parks at least one of the three hours each morning, playing the romping games the children know, gathering seeds and leaves, or watching the changes taking place in our garden or in the park.

The more curious among the children are apt to be attracted by the pebbles, leaves in their changing colors, grasses, wild flowers, seeds, etc.; and collections of these will be made, assorting according to color, form, or size, as the children decide. Free-hand cuttings, water-color sketches, or clay models of these may be made, as well as envelopes for collections. These collections will be carefully arranged and kept by the children and added to their collections at home. The seeds will be planted in their gardens in the spring and the trees identified by their leaves.

We shall watch the changes the frost makes and visit a farm, if possible bringing home seeds, fruits, leaves, etc. As the weather drives us indoors, we shall take up the home industries characteristic of the season, preserving fall fruits in different ways, drying, canning, preserving, and making jelly. This will be put away for our Thanksgiving feast, which we shall prepare for and serve to another class in the school.

Then will follow the preparation for cold weather in the warming of our houses, warmer bedding, and warmer clothing. We shall watch to see how much later the sun arrives in the mornings and how much earlier he retires at night. Note contrast between this and the conditions in the summer, how the cold affects the outside as well as indoor life.

December will be devoted almost entirely to the manufacture by the children of Christmas presents. The designs for these will be made, in many cases, by the children themselves from the objects collected, and they will be simplified so that they may need little or no help in making them. Cuts of such articles will appear in the Christmas number of this magazine.

The spirit of Christmas will pervade all our work, both the fun and joy of it as well as the beautiful in myth and story.

We shall dress a tree, making the ornaments and supplying the toys for some unfortunate family. If it be possible, the children will take the tree themselves to its destination. Contributions of food and clothing will be asked for those needing them both at Thanksgiving and Christmas.

Materials used. — Large blocks, clay, sand, paints and water color, paper, blackboard, and crayon, colored papers and paste, for illustration of outdoor scenes or stories.

Music. — Appropriate songs, selected from Smith's, Gaynor's, Neidlinger's, Hill's, and Elliot's songs for little children.

Stories. — "I'll Tell You How the Leaves Came Down," Susan Coolidge; "Golden Rod and Aster," "Philemon and Baucis;" "The Swan Maidens," F. J. Cooke; "Which Was Happiest?" A. E. A.; "The Orphan Squirrels" and "The Broken Wing," from the Norwegian; "St. Christopher," "'Twas the Night before Christmas," "Little Table, Dish Up!" "Three Bears," "Seven Little Kids," selections from *Little Folks Lyrics*, F. D. Sherman; "Wynkin, Blynkin and Nod," Field.

Rhythm.—Simplest marching, skipping, and representative movements of the falling of leaves, flying of seeds, and blowing of the wind.

Music.—*Characteristic rhythms*, by C. L. Anderson, Parts I and II; "Invitation to the Dance," Weber; "World's Exposition March;" etc.

Games.—Circle catcher, four circles, "Jacob and Rachel," "Falling Leaves," "Milkweed Babies," tag, "Wind Horses."

GRADE OUTLINES.

FIRST GRADE.

BERTHA PAYNE,
Instructor in Kindergarten Training.

History.—The work which takes the place of history in the first grade will center about the building of playhouses, which will be used later in making a village. Before beginning the individual playhouses the children will try to build a large one out-of-doors, from material to be found in the neighborhood, such as brush, bricks, or stones, and the large leaves of the castor bean and canna that grow in the school garden. After these attempts with crude material, the museum will be visited to see how other people built their houses with few tools and without bricks or lumber. The Indian wigwam and cliff dwellings will be given the most attention. This playhouse will probably be unsatisfactory from the standpoint of permanence, but may serve to bring the problems of building material and essentials of construction more clearly before the children.

Each child will then contribute suggestions for the individual doll-houses. These suggestions will be received and tested. The plan chosen will be that of a wooden house, a story and attic in height. The problems of proportion of width, length, and height, of the number and size of rooms, of the size, number, and placing of doorways and window spaces, will all demand constant reference to these points in the neighboring houses and in the children's homes. The amount of light needed and the necessity of air currents will be taken into account in planning doors and windows.

The floor plans will be drawn and measured to a scale, and then the side walls and ends, leaving the roof until the last; but, before all, each child will make a manilla-paper model, according to his own idea of size and shape.

After the visit to the farm the children will co-operate on a representation of the farm-stead, adapting block-houses and pasteboard boxes to represent the various buildings. This making will help to focus their attention upon the products and their use as food for man and animals. For example, the corn-crib is necessary for the preservation of the corn for chickens, pigs, and cows; the hayloft is directly over the horses' and cows' stalls for convenience of feeding; in the storeroom the best of the seed is saved for next year's planting, and the family stores are safe from frost in the cellar. Much of this matter of relationship is not perceived clearly during the visit, but comes as the making progresses, and it is for this reason that these representations are useful. They offer a motive for work and are a means of holding the remembered experience longer in consciousness.

Literature.—The children will tell stories to each other and to the children of other groups, as a matter of social entertainment. The teacher will also take her part. The interest and respect of the new children have already been enlisted by the vivid story-telling of two children in their own group. For this purpose some of the old fairy-tales seem best for a beginning, such as "The Elves and Shoemaker" and "Town Musicians" of Grimm. They will also have the story of "Clytie" and "Goldenrod and Aster," from *Nature Myths and Stories* (Cooke); and the story of Mondamin from *Hiawatha*, the story of Piccola as told by Miss Cary, the story of St. Christopher, and an adaptation of Eugene Field's "Story of a Symbol and a Saint," will be told at Christmas time. The children will learn some poems, such as "I'll Tell You How the Leaves Came Down" (Susan Coolidge), and "Up and Down," by George MacDonald, in *Violin Songs*, and "Where Go the Boats" (Stevenson).

Geography and nature study.—The children will visit the school garden nearly every day during pleasant weather to gather seeds for next year's planting, and to collect insects for the window-box. They have discovered the characteristic food of several kinds of larvæ, and also the vegetables best liked by the rabbit. The amount of growth of various plants for the

summer will be measured and compared, and then they will measure and keep a record of the height of each child, to be compared with his height in six months. The weeds which have crowded upon the crops will be classified and traced to the adjoining field. The children have decided upon certain kinds of trees that they wish to have planted in the school garden, and with this in view will visit the park to see what attractions other trees offer. The tree selected by each child will be observed by him and its condition recorded in color at intervals throughout the school year.

The trip to the farm will be used to give them a larger picture of the conditions of production and the necessity and conditions for transportation. If possible, we will go to the docks to see the ship-loads of peaches unloaded, and to South Water street to see the market wagons loaded for delivery to groceries.

Another trip will be taken to the swamp and to the lakeshore at a point near the school. The children will be on the alert for interesting things to bring back to the schoolroom. Pebbles, sand, and plants will be brought from the lakeshore and swamp-water insects and characteristic plants from the swamp to fill an aquarium. The study growing out of each of these trips will be in the arrangement of specimens, in performing simple experiments in answer to questions that may be asked, and in making records in modeling, painting, drawing, or making.

A model of the beach will be made, and thereby the slope and the relative placing of sand, small pebbles, and cobblestones will be called to mind, as well as the beach plants and cliff plants.

Cooking.—This will be of the simplest kind—baked apples, baked potatoes, popped corn, custard, and barley candy.

Manual training.—Making doll-house in wood, and calendars for Christmas presents.

Sewing.—Making dusters and bags to hold material.

Modeling.—Fruit, animals, and Christmas presents in the form of napkin rings and candlesticks.

Singing.—Songs of the season and Christmas songs, melodic exercises based upon them, and reading of familiar songs. Songs: "The Squirrel's Thanksgiving," "Wind Song and the Apple Tree," from *Modern Music Series*, Book I; "Farewell to Summer," from *Songs for Little Children*, Book I (E. Smith).

SECOND GRADE.

CLARA ISABEL MITCHELL.

FALL QUARTER.

THE subject-matter of the course of study for the second grade is found in the natural environment, also in the social life of the community, especially that in which the children consciously partake.

The school program of work, play, and study is planned to give the children experience, to help them interpret that experience, and to give it adequate expression. It is therefore made up among the social occupations of cooking, gardening, wood-working, pottery, spinning, weaving, dyeing, and basketry; field and industrial excursions; plays, games, and entertainments; lessons in correlated nature study, history, literature, geography, and mathematics; and art expression in drawing, painting, clay-modeling, oral reading, and music. Writing and reading are taught as needed in the study of subjects and in the statement of questions and conclusions.

Cooking.—Baking of apples and potatoes in ovens out-of-doors. Apple jelly. Cranberry sauce. Pop-corn balls for Thanksgiving. Cream candies for Christmas.

Gardening.—Storing of seeds, vegetables, and grains from the garden planted last spring. Setting out of bulbs. Planting of window-boxes with seeds of the children's selection.

Wood-working.—Window-boxes. Trays for Christmas presents.

Pottery.—Tiles for window-boxes and trays.

Spinning.—Practice with spindle and spinning-wheel in making wool yarn.

Weaving.—Holders of hand-made, also machine-made yarn and roving. "Betsy Ross" cushion-covers, for Christmas presents, made of half-inch cotton strips, two colors, in plain weave, eighteen by twenty-four inches.

Dyeing.—Wool yarn and roving for holders. Cotton strips for cushion-

covers, with logwood, madder, indigo, fustic, cochineal, willow bark, sumac, turmeric, cutch, and iron rust.

Basketry.—Small work-basket of rattan, Nos. 2 and 3.

Excursions.—Woods, lakeshore, swamps, and sand ridge. Farm; produce and fish markets. Carpenter shop, blacksmith's shop; brick-yard, shipping and freight yards.

Nature study.—Collecting and labeling of all plants found in typical swamp, wooded, and sandy areas; methods of seed-dissemination in each. Stocking of aquarium and insect cage with specimens of animal life found on the same areas, for continued observation. Record in water color of seasonal changes in landscape.

History.—Beginnings of arts and industries in the life of primitive man. (1) Hunter life. North American Indians and ancient cave-dwellers as types. Rough stone weapons and bow and arrow; discovery of fire; cooking; invention of pottery; building of stone and timber shelters; domestication of animals. (2) Shepherd life. Present-day Arabs and ancient Hebrews as types. Dependence upon pasture land; wells, springs, and rivers; nomad life; carrying of tents; use of horses and camels; milk and flesh foods; working of leather; spinning and weaving of wool; making of carpets; dyes; beginnings of commerce; family life; patriarchal government; men servants and maid servants.

Literature.—Indian myths adapted from Emerson's *Indian Myths* and from the United States Ethnological Reports. The Bible stories of Abraham, Isaac, Jacob, and David. The Christmas story. "Muleykeh," Browning.

Oral reading.—*Autumn Fires* and *The Lamplighter*, Stevenson; *The World*, Anonymous.

Geography.—Soils of the swamp, lakeshore, prairie, and garden collected and compared as to appearance and constituents. Comparison of granite, limestone, sandstone, quartz, and mica as to color and hardness. Lessons on observations made at the farm upon the storing of fruits, grains, and vegetables, and the care of stock. Pictures of mountains and forests as background for hunter life; plains and hills as grazing land; deserts and oases as home of nomads; Arabian deserts, plains, and hills.

Mathematics.—Review and completion of work done by first grade in use of footrule and yardstick, liquid and dry measures, metric scales of weight, and thermometer. Learning to use and write numerical expressions for halves, fourths, eighths of the inch; halves, thirds, fourths, sixths, and twelfths of the foot; halves, thirds, and fourths of the yard. Learning and writing of the multiplication tables of ten, five, two, and three as they are needed in measuring. Writing and reading of all numbers used. Signs for addition, subtraction, multiplication, division, and equals taught with processes as needed. All of above to be taught in the working out of problems arising in the various occupations.

Plays, games, and entertainments.—Preparation and occasional dramatiza-

tion of stories, and reports of work for morning exercises. Serving of luncheons on birthdays and holidays. Phonics games. Guessing games. Skips, runs, and gliding movements to music of $\frac{2}{4}$, $\frac{3}{4}$, and $\frac{4}{4}$ rhythms. Catch-ball, circle-ball, toss-ball, and dodge-ball. Hopping pull away. Cat and mouse. Nine-pins.

Drawing and painting.— Illustration of stories and lessons. Studies from plant and animal life. Landscape of changing seasons. Patterns and working drawings for things made and modeled.

Writing.— New words and sentences which are a necessary part of the learning of new subjects. Rapid writing of needed words in a "dictionary" as a help in written lessons. Records of work done in all subjects, either dictated to the teacher or written directly by the pupils. Rapid visualization and writing of words which have been mis-spelled.

Reading.—Directions for work, rules for cooking, dyeing, and making. Written records which are to be discussed. Simple written and printed stories relating to subjects studied. Picking out of stories, with help of teacher, by means of questions and thought analysis. Verses indicated under "Oral Reading." Texts for songs.

THIRD GRADE.

GUDRUN THORNE-THOMSEN.

OUTLINE OF WORK FOR THE AUTUMN QUARTER.

THE basis for the work of the year is the community life of the children. The aim is to present the best conditions for the children to gain social experience, and to use this experience for the good of the community. To this end, the children will be organized into groups engaged in social activities.

Activities and occupations which will be carried on during the year are cooking; baking and preserving; care of domestic animals; chickens; gardening; a vegetable and flower garden; pottery; making of dishes, vases, statuettes, bas-reliefs; sewing; making of necessary articles for use in the school and at home: aprons, dusters, bags; woodwork: necessary apparatus, gifts for the home, toys. Other activities may be engaged in as necessity demands.

Knowledge matter: The children will be encouraged to acquire knowledge from every available source in order to carry on these activities in the most effective manner. For this purpose it will be necessary to visit factories and other places in the

vicinity where similar occupations are carried on; to study in museums various collections related to these industries; experiments; and to use books and pictures, as well as objects and specimens from the school museum. Each activity has a scientific and a social aspect; both will receive due attention.

Records of the children's work will be kept in the form of finished articles, collections of objects studied, written notes, essays, drawings, and paintings.

1. *Cooking.*—The preparation and cooking of foods, the serving of luncheons, setting the tables, waiting at the table, and washing dishes are typical social occupations, thoroughly adapted to the physical and mental capabilities of the children of the third grade. In this work the children manipulate and choose materials, and have great opportunity for independent action. They feel the need of accuracy and neatness, and have every incentive to grow helpful and courteous. It makes a demand on the whole being, and is therefore one of the most educative activities of the school.

During the autumn quarter the children will make grape juice, put up jellies, make potato and corn soups, make bread and churn butter; and at Christmas time they will make barley candy and cookies. The activities relating to foods, both in the home and in the larger community, are most varied and full of lasting interest to children. Through his own occupation the child enters into a sympathetic relation with his surroundings, makes observations, and collects data to reinforce his own activity.

Subject-matter related to cooking:

(*a*) History: The farm. At least two visits will be made to a farm during the autumn quarter. Life and work of each member of the farm family. Farmer's care of animals. Study of the cow—habits, shelter, food, prehension of food; teeth, structure as adapted to function; chewing of cud. There will be an opportunity near the school to watch a cow closely, and to see her milked and fed; amounts of milk and butter used in a household per week, per month; the average yield of milk of one cow; amount of butter gotten from one gallon of cream. Present methods of threshing wheat and oats. The children will have the sheaves of wheat and invent methods of threshing and milling. Visits to mill.

REFERENCES: See Miss Rice's article in ELEMENTARY SCHOOL TEACHER, Vol. II, No. 4.

(*b*) Geography: A study of forms of land adapted to farming. The corn and wheat belt of the United States. Rainfall; slopes of land; work of rivers; underground water, springs. Means of study: Forms of land on all excursions; the brook basins at the north shore; work of rain wherever this may be noted. At the south shore a whole river-basin system on a small scale

may be studied. Children will mold in sand typical river basins; will see pictures and stereopticon views. Reading: Carpenter, *Geographical Reader*, "North America," "Indian corn and the corn belt;" *A Visit to a Great Wheat Farm*.

REFERENCES: See Miss Baber's article in ELEMENTARY SCHOOL TEACHER, Vol. III, No. 2.

(*c*) Science: Man's methods of distribution and collection of seeds for his own purposes. Nature's way of seed-dissemination. Proportion of number of seeds sown to number of seeds gathered. Water in fruit. Weigh fresh fruit, cut it into small pieces, and leave it to dry; when perfectly dry weigh again. The difference in weight represents the amount of water evaporated. Different members of the class will choose different kinds of fruit and compare results.

2. *Clay modeling, pottery*.—Making of dishes, vases, statuettes, bas-reliefs.

The farm animals which most interested the children will be modeled by them. These will be used in the model of a farm which the children are to work out in cardboard.

For Christmas gifts the children may choose from the following list, or suggest other articles: Vase, cup and saucer, paper-weight, pin-tray, ash receiver, napkin ring, postal card holder.

Children first work out their own plans in drawings or paintings, and next visit Burley's and other large china stores. After the visits the plans are often revised, and then the work in clay begins. Pictures and casts are used as means of study.

3. *Physical training*.—Outdoor sports and games, gymnastic exercises, dancing.

Subject-matter related to physical training. (*a*) History: Greek education and games, Spartan training, Olympic games. (*b*) Literature: Stories of Greek heroes which show that the perfection of the body was used in service; story of Phidippides, Leonidas, Theseus.

4. *Celebration of festivals and entertainments*.—Nothing in the school is of higher moral and intellectual value than the work done in preparing for the daily exercises, and for the celebration of the great festivals of the year. Spontaneity, the power of concentration, self-control, absence of self-consciousness, are qualities which grow out of this work. The children, stimulated by the desire to do something well for others, willingly give the close study of subject-matter that is required. The dramatic element which often enters into this work promotes freedom of action and a sense of responsibility.

For the daily exercises the children prepare reports of their work, poems, or simple dramatic representation of stories. For Thanksgiving and Christmas they have a part in a greater plan worked out by the whole school.

5. *Field work*.—Under this head comes work growing out of the children's

observations of nature, on their walks and trips in the immediate neighborhood. During the fall the children visit the south shore, the woods, a swamp, and perhaps the dunes. The work comprises a study of some phases of the relationship between soil, animal, and plant life, and the effect of the changes of season.

Subject related to field work: (*a*) Literature: Poems and stories of nature, as "I'll Tell You How the Leaves Came Down," by Susan Coolidge; "The Tree," by Björnsen; the Greek myths of Clytie and Melampus and the Snakes. (*b*) Geography: As the nature-study and geography often coincide in the primary grades, it seems immaterial what name is attached to the work. The climatic conditions, temperature, rainfall, sunshine, must be studied in order to help the child to realize cause and effect.

6. *Manual training*.—Construction of a chicken house, to hold five chickens; the children to work out size and shape; a working drawing to precede the work. For Christmas gifts the children may select from the following list, or suggest other articles: Book-rack, footstool, paper-knife, shelves, envelope rack.

7. *Art*.—The art work comprises clay-modeling, designing with crayon and water color, blackboard drawing, water-color painting. The art work is constantly used as a means of study and as thought expression derived from the activities of the school life.

Subjects for water-color painting: The landscape, fall flowers, and fruits. Blackboard drawing: Farm animals, illustration of stories, designing, decoration on Christmas presents.

8. *English*.—The third-grade pupils will feel a constant need for reading to gain information. The aim is to give particular attention to the reading and writing during this year, so that the pupils may get skill enough to read anything which is adapted to them, and to write easily records of their work and original stories.

In writing, the pupils need many words which they cannot spell. The teacher either writes them on the blackboard or the child looks them up in his "dictionary," a notebook in which each child writes the words he has misspelled or asked for in the previous lessons. This dictionary, consisting of words which the child actually needs and uses constantly, becomes a spelling-book, if so it may be called, and the children often take it home to learn the words.

Rules of grammar will be given whenever needed to correct oral or written language.

9. *Arithmetic*.—The work in the third grade will be conducted on the supposition that the children are living a community life. If they are actually doing things which have social value, they will gain accurate knowledge of the activities in which they are engaged and grow into right habits of living.

Whenever the children encounter a process which they do not know how to handle, the most economic way of treating that process is shown them.

After finding out the quick and easy way to add, subtract, multiply, and divide, a great many problems of the same nature are given to the children at school and for home work. In this way the children are constantly gaining facility and ease in the automatic use of numbers.

FOURTH AND FIFTH GRADES.

GERTRUDE VAN HOESEN.

"Community life is the ideal of education, because it is the only ideal great enough to provide for the all-sided development of the individual."—*Colonel F. W. Parker.*

Under this ideal the basis of the work lies in the various activities of the school community — weaving, cooking, clay-modeling, manual training, metal work, gardening, gymnastics, and play. Each of these activities sends the children to the library, to the laboratory, to nature, for information, which may be classified as history, geography, science, or mathematics. In almost every case a demand is made for definite measurement, which necessitates the use of arithmetic.

Textiles.—The children will weave linen on a large loom, rugs on a large carpet-loom, smaller rugs on a hand-loom, silk or linen on a small hand-loom, and holders on a pasteboard loom.

Subject matter necessary: A. History: (1) the textile industries of Chicago; (2) the textile industries of the world; (3) the New England colony; (4) early explorers — Marco Polo, Columbus and Magellan.

The children will engage as far as possible in the actual work of the Puritan household.

1. They will weave and dye some of the material used.
2. They will make candles, both by dipping and using the molds.
3. They will prepare and cook the food used by the colonists.
4. Embroider designs in simple cross-stitch.
5. Dress Puritan dolls,

REFERENCES: Starr, *Stories of Indian Life;* A. M. Earle, *Child Life in the Colonial Days;* Alice Morse Earle, *Home Life in Colonial Days;* William Elliot Griffis, *The Boys of Scrooby; The Pilgrims in Their Three Homes;* H. C. Wright, *Children's Stories in American History; Children's Stories in American Progress;* N. Moore, *Pilgrims and Puritans;* H. A. Smith and S. T. Dutton, *The Colonies;* C. C. Coffin, *Old Times in the Colonies; The Story of Liberty; Stories of Industry.*

B. Geography: (1) geography of the Atlantic slope; (2) study of degradation and aggradation on the lakeshore and in the laboratory; (3) formation of coastal plains, of sunken rivers, and of river action; (4) study of the

sources of flax and wool, their cultivation, manufacture, and distribution in connection with the textile industry.

REFERENCES: See Miss Baber's outline.

C. Literature: Jennie Hall, *Viking Stories;* H. W. Longfellow, *Courtship of Miles Standish.*

Cooking.— The children will can their ripe tomatoes, pickle their green ones, make jelly, butter, cheese, and continue cooking in preparation for luncheons. They will also make candy for Christmas.

Jelly: In the preceding grades the children have made jelly for lunch. They will make it this year in order to find out the relative amount of juice in the different fruits. For this experiment they will use all of the fruits in market in October. Part of this jelly will be served at lunch and part of it sent with the Thanksgiving offerings to the settlements.

With the data obtained from making the jelly, the children will dry the same fruits in order to find out the relation between the amount of juice and the amount of water in the fruits.

The butter will be made after a visit to a farm. The question, "Why does the farmer sell his milk instead of making butter?" always arises with children of this age after a visit to a Cook county farm. By making it, they find out the actual cost of a pound of butter. With this as a basis they will nvestigate the industry carried on in creameries and dairies.

They will make cheese, both cottage cheese from skim-milk, and cheese made with rennet.

History and geography necessary for cooking: (1) excursions to places where food is found in large quantities—Stock Yards, South Water street, large grocery stores, etc.; (2) source of food, how it is prepared, and how transported to the city; (3) excursion to the Rock Island car yards to examine and measure the different cars used in transportation; history of transportation.

REFERENCES: Miss Baber's outline; Miss Rice's outline.

Physical training.— Games and exercises adapted both to the age and individual physical development of the children.

Nature study.— A comparative study of the plants and animals living on the areas around Chicago: (1) swamp; (2) dunes; (3) south shore of the lake; (4) north shore of the lake.

They will note especially: (1) the difference in the roots, particularly as to length and manner of growth; (2) the different ways in which the seeds are scattered. In seeking an explanation for the differences in growth, an examination of the soil from each area will be necessary. Of these examinations accurate records will be kept by each child.

Manual training.— The children will make a train to illustrate the different cars and boats used in transportation, plate-racks needed in the schoolroom, and Christmas presents.

Applied arts.— They will design and make baskets, hem dust-cloths, model tiles for teapots, which will necessitate geometric design, and tiles showing the life in the New England colony or modes of transportation, which will necessitate illustrative drawing.

English.— In every subject or activity under consideration the children are sent over and over again to books in order intelligently to continue their work. The ideal is to accept only perfect written work, whenever such work is necessary or helpful. Under this ideal, it is necessary to teach an intelligent use of the dictionary, to make a spelling-book composed of all words asked for, or mis-spelled, and to teach all the rules of English which are necessary in attaining the ideal.

Arithmetic.— The work under consideration will require the fundamental operations, fractions, and decimals, linear, square and cubic measure, besides the measures used in the cooking room.

SIXTH GRADE.

MARY REED.

OUTLINE FOR AUTUMN QUARTER.

History.—The French exploration and settlement of the Mississippi valley: Marquette; La Salle. Progress of industries in the English colonies. Comparison of French and English settlements. Beginning of the English movement westward: Washington's expedition to the Ohio. War between the French and English: Braddock; Quebec. England's restrictions on colonial industries. The Revolutionary War.

Geography.—Topography of North America as a whole: details of sections involved in the history study. Region about Chicago; causes of its present topography: glaciation and lake and river action.

English.— Description of experiments: recording of field notes and other data. Writing of stories from history subject-matter and a simple dramatization of some historical event. Exercise in the correct use of capitals and punctuation, and study of subject, predicate, and the sequence of tenses.

French.— Conversation: stories of Marquette and La Salle, and of life in the early French settlements. Grammar: subject and predicate.

German.—Conversation, black-board reading, and simple written exercises.

Literature.— Hawthorne, *Grandfather's Chair;* Holmes, "One Hoss Shay;" Catherwood, *Heroes of the Middle West;* Irving, *Rip Van Winkle.*

Science.— Chemistry and physics in connection with cooking. Observations of weather conditions, with use of thermometer, barometer, and rain gauge; plant life and soil of a selected area. Field trips to dunes, swamp, and lakeshore to study the plants, soil, and rocks of each.

Cooking.— Canning and preserving of fruits. Beginning of study of fermentation. Flour cookery and making of doughs and batters. Quantita-

tive determination of gluten in flour. Making of special dishes as occasion requires, as pastry for Thanksgiving and Christmas candies.

Number.—(1) Correlated: problems connected with cooking, with science lessons and summary of weather records, with longitude and time, and with children's own expense accounts. (2) Outcome: use of denominate numbers, English and metric; common and decimal fractions.

Art.— Clay: sketching and modeling of scenes from the story of Marquette and La Salle. Painting: in connection with study of plant life and of the landscape; study of early American building.

Manual training.—Making of articles needed in schoolroom and necessary simple apparatus; designing and making of Christmas gifts.

SEVENTH GRADE OUTLINE.

ELSIE AMY WYGANT.

History.—The history studied in the seventh grade will be the development of book making. During October the class will study the making of primitive records, hieroglyphics in clay and stone, and wax tablets, dwelling more at length on manuscript books of the Middle Ages. They will try to picture phases of this time, showing how the monasteries became the center of learning, with the control of books and book making, and the life outside of the monastery in the feudal castle. The story of St. Benedict and his followers in the work of book making will be told, trying to catch that spirit of high purpose and devotion which inspired some of these copyists. The law of Charlemagne which provided that every monastery should have a scriptorium and at least one copyist will be noted. Story of St. Jerome and of St. Francis of Assisi.

The scarcity of books made teaching through pictures a common thing, hence the predominance of mural decoration in public places, churches, etc., at this time. As an example of this, Giotto's pictures of St. Francis of Assisi, painted on the walls of the church at Assisi, were chosen.

In November this work will continue, taking Venice as the center of art and of commerce, showing how the route of the crusades increased the importance of Venice.

December will be devoted to a study of the crusades and, in this connection, a rounding out of the pictures of chivalry begun in October.

This history will grow out of the actual making of books which is the industrial side emphasized in the seventh grade. The children will recover either an old book which they wish to preserve, or they may put into more permanent and serviceable covers some of the paper-bound books of Mosher & Co. These publications are chosen, both because of their suitable subjects and because of the excellence of material and beauty of workmanship. The children will bind their work of the year, and will illuminate and bind one other thing.

The group will form itself into a guild, with rules governing work, and their ideals of workmanship will be formulated. This will be written at the beginning of the year and modified as the children's knowledge of the work and interest in the craft increases.

A visit will be made to the Arts and Crafts Society of Chicago, and members of that body interested in book making will be asked to talk to the class in the hope that this contact with real industrial life may increase their respect for good workmanship.

Literature.—The literature will be used largely to enrich the picturing of the times, the people, and the places which figure in the history work. With this in view the children will read and have read to them *St. Jerome and his Beautiful Book*, by T. B. Aldrich; parts of *Ivanhoe* and *Marmion;* "Gareth and Lynette," from Tennyson's *Idylls of the King; The Vision of Sir Launfal;* Longfellow's "Venice;" "Giotto's Tower;" "The Sermon of St. Francis" and "The Builders." Some other work will be given in preparation for Thanksgiving, Christmas, and other festivals.

HISTORY REFERENCE.—Buchot, *The Books;* Putnam, *Books of the Middle Ages;* Matthews, *Book-Binding, Old and New;* Horne, *Book-Binding;* Pollard, *Early Illustrated Books;* Madan, *Books in Manuscript;* Montalembert, *Monks of the West*, Vol. I, p. 389; Longfellow, *Monte Cassino;* Jameson, *Legends of the Monastic Orders;* Arnold, *Little Flowers of St. Francis;* Sketch of "St. Francis of Assisi," *St. Nicholas*, Vol. VIII, p. 351; Quilter, *Giotto di Bondone;* Perkins, *Giotto;* Ruskin, *Giotto and His Works in Padua;* "Sketch of Giotto di Bondone," *St. Nicholas*, Vol. VIII, p. 676; "Guilds of Middle Ages," *The Craftsman*, December, 1901. (For full bibliography see ELEMENTARY SCHOOL TEACHER, March, 1902, p. 503.)

English.—The aim in the work in English is to make writing a pleasurable and easy means of expression, and to form and strengthen habits of correct speaking. Believing that ease in writing comes through writing often and regularly, at least one piece of work will be asked for every day during the coming term. This writing will cover the records of field trips, retelling or dramatization of stories which will be used for morning exercises and special festival programs, invitations to other grades, notes and letters to the parents, and written acceptance of invitations received.

Geography.—The geography for the autumn quarter will be a study of the region about Chicago, and will include field trips, each of which is to emphasize one or more topographical forms, namely, rivers, mountains, deserts, and glaciers.

Rivers (Calumet and Desplaines).

Mountains (Stony Island).

Deserts (Miller's Station and South Shore).

Glaciers (Stony Island and Desplaines River).

Every child supplied with a note-book will make hasty notes and sketches in the field. Upon our return the notes will be worked over, and a full record of the trip made. These records will be made in two ways. In

some instances we shall simply give an account of the trip taken. In others we shall go with one or more hypotheses, and upon such a trip the notes will give only such data as proves or disapproves the hypothesis.

Every field trip will include, not only a study of the topography of the region, but of the plants associated with that topography.

For details of map making see the mathematics below:

REFERENCES: Salisbury and Alden, *Geography of Chicago and its Environs;* Shaler, *Beaches and Tide Marshes;* Tarr, *Physical Geography;* Russell, *Lakes of North America, Glaciers of North America;* Geikie, *Earth Sculpture;* Geikie, *The Great Ice Age;* Gulliver, *Shoreline Topography;* Cowles, *Ecological Relation of Vegetation of the Sand Dunes of Lake Michigan;* Cowles, *The Plant Societies of Chicago and Vicinity;* Merrill, *Rocks, Rock Weathering, and Soil,* Bulletin II, *Geological and Natural History Survey of the Chicago Academy of Science.*

Science.—A part of the science period will be given to working out the plant relations suggested in the field trips for geography. In this connection a study of the soil will be made and two problems proposed, namely: What does the soil contain that the plant wants, and does the difference in the amounts of water in swamp and sand areas account wholly for the modification in plant structures?

To answer the first question make an anyalysis of the soil to find the amount of water, organic and mineral matter in it. Make same analysis of plants growing in that soil and compare results.

To answer the second, compare amounts of water in equal amounts of swamp and sand soils. Compare amount of water in equal weights of swamp and sand plants. How do soils compare with each other? Plants with each other? The plant with the soil in which it grows? Make simple chemical analysis of the same materials and compare.

This analysis will be put into some graphic form for use in the museum.

Upon these trips the especial work of the plants at this season will be noted and a classified collection of the seeds made. If the children have a working knowledge of the means of seed distribution, the quantitive phase of the work will be done with two questions in mind. First, are some seeds more sure of getting planted than others? Second, is this the main factor in the abundance of a given species? (To answer this question data must be gathered next spring also.)

The animal life found upon these trips will be studied, and when practicable brought home and their preparation for the winter observed in an outdoor cage made for that purpose.

The weather record with its interpretation will be an important part of the science work. The temperature of the air and soil, the barometer, and the direction of the wind will be noted upon the October record. (Later other items, as amount and intensity of sunshine, amount of rainfall, etc., will be added.) The record is kept upon a chart so arranged that the temperature

curve for the year may be followed. Change in landscape corresponding to the change in temperature and intensity of sunshine will be observed, and pictures of the landscape will be made twice a month to record this change.

The city weather bureau will be visited to see the methods of observations making in order to make our own as accurate as possible. The daily report of the weather bureau will be studied in view of the forecasts made upon it. As soon as a basis of judgment is gained, and some little skill in forecasting, the grade will form a weather bureau and make prognostications based upon their own observations and the weather report.

REFERENCES: Jackman, *Nature Study for the Grammar Grades; Practical Plant Physiology*, by Moor and by Detmer; Reynolds and Green, *Vegetable Physiology;* Coulter, *Plant Relations;* any good *Meteorology;* William Hamilton Gibson, *Sharp Eyes;* Cowles, *The Plant Societies of Chicago and Vicinity.*

Mathematics.— In the teaching of mathematics for the coming year the hope is that the children will grow into a sense of the need of the subject; that they may use mathematics as a tool, not as an isolated daily task. Because of this aim the problems in the various subjects will make conscious the demand for mathematics, so that at the time that a process is needed it will be taught, or drill will be given where skill in the manipulation of old processes is insufficient to make the tool a ready one.

Some algebra and geometry will be used during the year. The idea will be to emphasize the essential similarity rather than the occasional differences in the algebraic and arithmetical processes. When the use of fractions or the fundamental operations have become somewhat facile it will be the work of the seventh grade to formulate the principles involved. In cases where this is advantageous and feasible the processes may then be expressed in algebraic form. The positive and negative quantities, already somewhat familiar, will be used more freely, showing that every amount, magnitude, distance or force which admits of an opposite may be conveniently and simply distinguished by the use of plus and minus signs.

Geometry will be used whenever it will make the imaging clearer than will arithmetic and algebra.

Below is given, in some detail, such problems as may be demanded by the other subjects during the autumn quarter. It is not intended as a complete list, or that the whole will necessarily be covered. The amount and variety of the quantitive relations in the work are so great that only limitations of time and the children's ability can govern the choice of what is used.

The science work is very largely quantitive during this quarter. The children are more or less familiar with means of seed distribution, correspondence between lowering temperature and loss of plant and animal life, therefore the work will aim at definiteness of imaging. For instance:

a. Children will find actual number of seeds produced by a given plant. Number of these plants on a given area. What it would mean if every seed

germinated. Number of years required for plants to seed specified areas. Percentage of seeds destroyed.

b. The temperature of soil and air curves plotted on monthly science chart, replotted on sufficiently small scale to show year's curve on convenient sized paper.

c. Weighing of soils by metric system and the percentage of organic and inorganic matters. Same with plants.

The mathematics will enrich the geography by the making of a topographic map of Stony Island. This will necessitate use of compass and level; construction and measurement of angles; computing areas of a rectangle and constant use of decimals and fractions. Sufficient drill will be given in use of the standards of measurement, acres, rods, and feet, to make the estimates of distance in the field work as accurate as may be.

Astronomy.—Variation of the sun's positions and movements—variation of heat and light, latitude, longitude and time at sea and upon land; lantern lectures showing motion and position of plants, lunar topography, nebular, star clusters, sun-spots, etc.

Home economics.—The analysis of the amount of water and of mineral and organic matter in the soil and in plants will be continued in the study of foods. Analysis will be made of potato, white of egg, milk, and wheat, and as certain elements are discovered in given foods, experiments will be made on the effect of heat upon this element.

This analysis, as well as the other, will be graphically represented in some form suitable for use in the museum.

Housekeeping.—Care of room and its decoration.

Art.—The study of book-binding predetermines that at least a part of he art work of the year shall be a study of design suitable for book covers and the illumination of books.

For geography and science, rapid chalk modeling, pictures of the landscape in color, and of plants, seeds, fruit, and animal life in pencil, color and clay will be needed.

EIGHTH GRADE.

KATHERINE M. STILWELL.

THE work of this grade for the autumn quarter will include history, geography, nature study, mathematics, gymnastics, music, manual training, and Latin or German. Detailed outlines of these subjects appear below. In their development reading, writing, drawing, painting, music, and modeling will be used.

HISTORY AND GEOGRAPHY.

The pupils of the grade are beginning the study of Roman history by getting for themselves some notion of the Rome of today through photographs, stereopticon views, books, and, wherever possible, talks with relatives or friends who have been to Rome. Each child has taken some special object of interest to look up, such as the Colosseum, the Pantheon, the Forum, St. Peter's, the Vatican, and is to tell the class what he has found, illustrating by means of pictures, diagrams on the board, etc. One pupil brought an invitation from his father to the entire class to spend an evening at his home, for the purpose of looking at a collection of several hundred lantern-slide views of Rome.

The pupils will learn something of the topography of Rome, the origin of the plain and of the hills upon which the city is built. They will express this knowledge in sand maps, and then compare the location of Rome with that of Chicago. As there are many new pupils in the class, it will probably be necessary to make a brief study of Chicago—its location on the Chicago plain, its situation on Lake Michigan, and with reference to the surrounding country. Excursions will be made to the chief points of interest in the city, and comparisons made with Rome as to the manner in which the two cities have utilized their physiographic features.

The class will take up next some of the causes of the development of Rome, especially the advantages of topography, including here a study of the surface of Italy, its shape, and position on the continent, the situation of the Alps and Apennines, and the nature of its soil and climate. This will lead them to the consideration of ancient Rome, and they will note the contributions to her civilization made by the Etruscans and Greeks, and will reconstruct, so far as they can, the home life of the Romans, their dwellings, furniture, dress, occupations, amusements, etc.

The government of Rome will also be discussed, together with her increase of territory and the way in which she governed her conquered peoples. The Roman method of government will be compared with our own.

Teachers are referred to Mommsen's *History of Rome.* The pupils will use Harding's *City of the Seven Hills,* Guerber's *Story of the Romans,* Botsford's *History of Rome,* Hare's *Walks in Rome,* Lanciani's *Ruins and Excavations in Ancient Rome,* Baedeker's *Central Italy,* Harper's *Classical Dictionary,* Smith's *Dictionary of Antiquities,* encyclopædias, and Guhl and Koner's *Life of the Greeks and Romans.*

In addition to the geography already suggested, the class, starting with the volcanic origin of the hills of Rome, will study Vesuvius. They will learn, by the use of pictures, its present appearance, and will read about its formation, its past history, and its connection with the present seismic disturbances.

Using a map, they will locate the places of present activity (Russia, Mexico, Guatemala, the West Indian and Aleutian islands, and Hawaii). They will be shown stereopticon pictures of the great volcanoes of the world, and be encouraged to read their history. They will then study the types of eruptions, with special emphasis on Mt. Pelée as an example of the explosive type, and on Mauna Loa, Hawaiian Islands, as an example of the expulsive type. They will note the characteristics of each type, and will learn by pictures and by sand-modeling the characteristic shape of the hill or mountain built by each of the two kinds of eruptions, as well as the shape of the most common of all volcanic mountains, the composite cone. At every stage they will use the volcanic formations of Italy as the basis of comparison.

The various theories of the causes of eruptions will be presented and discussed. The pupils will use the references indicated below:

The *National Geographic Magazine,* June and July, 1902; the *Century* magazine, September, 1902; *The Outlook* (George Kennan's articles), 1902.

NATURE STUDY.

The nature study will consist largely of field work, for which the vacant lot south of Sixtieth street and east of Greenwood avenue will be used.

As indicated in Mr. Jackman's outline, there will be a survey of the results of the past growing season, and a study of some of the causes that have contributed to these results. This grade

will make a special study of the relation of the plants to each other, to sunlight, to moisture and to soil. This will require the use of reading, writing, painting, drawing, and number. A geometrical survey will be made of the lot itself and of the irregular areas covered by different plants. Additional work will be done in physics, Mr. Jackman having planned a series of lessons on electricity.

MATHEMATICS.

In connection with history the following work in mathematics will be given:

Geometry of structural work: (*a*) forms suggested by the University Press Building (starting with the Roman arch); (*b*) Roman architecture; (*c*) study of bridges; (*d*) steel buildings.

Related to nature study, the following surveys will be made

Geometrical surveying: (*a*) selected area for nature study; (*b*) irregular areas; (*c*) geometrical topography.

Additional work will be assigned those pupils who have not met the requirements of this grade of work.

MANUAL TRAINING.

ANNETTE BUTLER.

The manual training will be based upon the study and comparison of ancient and modern Rome with Chicago.

The design and construction of the commonest types of household furniture used in ancient Rome will be studied and compared with furniture in use at the present time. The different woods found in Italy, of which the furniture is most commonly constructed, will be considered. They will be compared with our common woods in texture, color, and durability. The class will visit one of the largest furniture stores of Chicago. After this visit they will begin the planning of Christmas presents, which will consist of simple articles of furniture. Each pupil will make his own design, following it by an accurate working drawing to a scale.

GERMAN. GRADES VII AND VIII.

E. PROKOSCH.

Starting with a description of the school and its surroundings, developed by German conversation and written exercises, the class will try to get a clear picture of the city of Chicago in its geographical, historical, and commercial aspect. A comparison with the modern and ancient city of Rome will lead to some German reading on Roman history. The interest of the pupils in the German language and their practice in independent reading will be greatly helped by a collection of German references, dealing in simple language with the nature study, history study, etc., of the two grades, and arranged by the teacher of German, with the help of the grade teachers, with special regard to the needs of individual pupils.

LATIN.

The pupils in the seventh and eighth grades who are not studying German will begin Latin. This will be closely related to the Roman history and will consist of simple reading lessons on the home life of the Romans.

MUSIC AND GYMNASTICS.

For work in these subjects see the outlines of the special teachers.

AN EXPERIMENT IN SELF GOVERNMENT.

At the beginning of the year, after talking with us about different plans of government, our teacher said there were four possibilities—anarchy, despotism, paternalism, and self-government.

After a very short discussion we saw that anarchy was out of the question—at least we said that we did. We were told we could not, of course, have complete self-government to start with, but that this would mean a protectorate at first. A ballot was taken, and almost all of us voted for self- government. But it soon became evident that self government really meant to us doing as we pleased—an idea that got us into trouble, as you will soon see.

For a few days everything went smoothly, but that was only because the plan was new. As soon as the novelty wore off we became careless regarding the rights of others, and before long we were very close to anarchy. Our teacher told us that the abuse of liberty always means the loss of liberty and the coming of a despot, but this warning only served to put off the evil day.

One afternoon we were left to ourselves during a study period. For a while we were very quiet; then someone spoke; the others joined in, and before long we were in the midst of the greatest confusion. Suddenly the door opened, and our principal stood on the threshold. "Is this the way you govern yourselves?" he asked. We immediately became quiet, and without waiting for a reply he left, but within a few minutes all was confusion again. He returned, saying: "Evidently you cannot be trusted, so I will remain with you."

When our teacher returned he was told of our failure; he started to speak, but did not, and after a pause, during which we were in the greatest suspense, he dismissed us in silence. We walked out with slow steps and heavy hearts, much more impressed by the silence, I am sure, than we should have been by the severest scolding.

The next morning on the most conspicuous part of the blackboard was written the following:

Persons who abuse liberty must be made to obey the law. The Eighth Grade has proved repeatedly that it is not capable of self-government, and it is therefore placed under the rule of law. You will copy and obey the following rules:

Then followed several rules, the three that impressed us most being these:

You will not be trusted at all; you will not do anything except under the personal direction of some teacher; at the close of each recitation you will remain in your seats until a teacher appears to escort you to your next class.

Your recitations will be mere recitations; there will be no discussions; your instructors will be no longer teachers, but officers charged with the enforcement of the law.

You will each keep a copy of these rules where you can refer to them instantly at any time. You will ask no questions; you will simply obey them.

On that memorable day there was weeping on the part of the girls, and even the boys were not happy. We were led about from class to class like prisoners, and treated in every way as such.

This went on for some days; then one by one the deserving pupils were restored to liberty and were placed upon a free list. When this list was written on the board it was with the following explanation:

The free-list pupils live under liberty rather than law. That is, they follow a set of principles which they themselves have originated, or consented to, instead of a set of rules which they have had no part in making and obey under compulsion. They are trusted, not watched; they regard teachers as friends and counselors, not as policemen; and they have the privilege of voting. In general, they will simply observe the ordinary customs that obtain among ladies and gentlemen everywhere. In particular, they will be guided by a constitution which they have freely adopted.

Then followed the constitution, every article of which was discussed and consented to by the pupils on the free-list.

As the advantages of liberty appeared, more and more pupils earned the right to be placed upon the free-list, until finally we were all living under liberty again. But liberty meant more

than it did before, and, although some have been put under law for a time since then, most of the class have tried faithfully to live up to our constitution, and the class as a whole has never failed again as it did on that day before the reign of law began.

As a result of our experiment, we have come to see that self-government brings out the true character of a person; that it teaches the real meaning of liberty and develops self-control, uprightness, and a sense of honor.

AN EIGHTH-GRADE CLASS.

NOT IN CHICAGO.

FRENCH.

ACTE DEUXIÈME.

SCÈNE I.

(Monsieur Jourdain, le maître de musique, le maître à danser.)

Monsieur Jourdain. Voilà qui n'est point sot. Ah! les menuets sont ma danse; et je veux que vous me le voyiez danser. Allons, mon maître.

Le maître à danser. Un chapeau, monsieur, s'il vous plaît.

(Monsieur Jourdain va prendre le chapeau de son laquais et le met par-dessus son bonnet de nuit. Son maître lui prend les mains et le fait danser sur un air de menuet qu'il chante.)

La, la, la, la, la, la,
La, la, la, la, la, la, la,
La, la, la, la, la, la,
La, la, la, la, la, la,
La, la, la, la, la.

En cadence, s'il vous plaît.

La, la, la, la, la.

La jambe droite.

La, la, la.

Ne remuez point la tête.

La, la, la, la, la, la, la, la, la, la.

Vos deux bras sont estropiés.

La, la, la, la.

Tournez la pointe du pied en dehors.

La, la, la.

Monsieur Jourdain. Hé!

Le maître de musique. Voilà qui est le mieux du monde.

Monsieur Jourdain. A propos, apprenez-moi comme il faut faire une révérence pour saluer une marquise; j'en aurai besoin tantôt.

Le maître à danser. Une révérence pour saluer une marquise!

Monsieur Jourdain. Oui, une marquise qui s'appelle Dorimène.

Le maître à danser. Donnez-moi la main.

Monsieur Jourdain. Non, vous n'avez qu'à faire, je le retiendrai bien.

Le maître à danser. Si vous voulez la saluer avec beaucoup de respect, il faut faire d'abord une révérence en arrière, puis marcher vers elle avec trois révérences en avant, et à la dernière vous baisser jusqu'à ses genoux.

Monsieur Jourdain. Faites un peu. (Après que le maître à danser a fait trois révérences.) Bon.

SCÈNE II.

(Monsieur Jourdain, le maître de musique, le maître à danser, un laquais.)

Un laquais. Monsieur, voilà votre maître d'armes qui est là.

Monsieur Jourdain. Dis-lui qu'il entre pour me donner leçon. (Au maître de musique et au maître à danser.) Je veux que vous me voyiez faire.

SCÈNE III.

(Monsieur Jourdain, un maître d'armes, le maître de musique, le maître à danser, un laquais, tenant deux fleurets.)

Le maître d'armes (après avoir pris les deux fleurets de la main du laquais, et en avoir présenté un à monsieur Jourdain). Allons, monsieur, la révérence. Votre corps droit, un peu penché sur la cuisse gauche. Les jambes point tant écartées. Vos pieds sur une même ligne. Votre poignet à l'opposite de votre hanche. La pointe de votre épée vis-à-vis de votre épaule. Le bras pas tout à fait si étendu. La main gauche à la hauteur de l'œil. L'épaule gauche plus carrée. La tête droite. Le regard assuré. Avancez. Le corps ferme. Touchez-moi l'épée de quarte, et achevez de même. Une, deux. Remettez-vous. Redoublez de pied ferme. Une, deux. Un saut en arrière. Quand vous portez la botte, monsieur, il faut que l'épée parte la première, et que le corps soit bien effacé. Une, deux. Allons, touchez-moi l'épée de tierce, et achevez de même. Avancez. Le corps ferme. Avancez. Partez de là. Une, deux. Remettez-vous. Redoublez. Une, deux. Un saut en arrière. En garde, monsieur, en garde.

(Le maître d'armes lui pousse deux ou trois bottes, en lui disant : En garde.)

Monsieur Jourdain. Hé !

Le maître de musique. Vous faites des merveilles.

Le maître d'armes. Je vous l'ai déjà dit, tout le secret des armes ne consiste qu'en deux choses : à donner et à ne point recevoir.

Monsieur Jourdain. De cette façon donc, un homme, sans avoir du cœur, est sûr de tuer son homme et de n'être point tué ?

Le maître d'armes. Sans doute. N'en vîtes-vous pas la démonstration ?

Monsieur Jourdain. Oui.

Le maître d'armes. Et c'est en quoi l'on voit de quelle considération nous autres nous devons être dans un État, et combien la science des armes l'emporte hautement sur toute les autres sciences inutiles, comme la danse, la musique, la . . . .

Le maître à danser. Tout beau ! monsieur le tireur d'armes ; ne parlez de la danse qu'avec respect.

Le maître de musique. Apprenez, je vous prie, à mieux traiter l'excellence de la musique.

SCÈNE IV.

(Un maître de philosophie, monsieur Jourdain, le maître de musique, le maître à danser, le maître d'armes, un laquais.)

Monsieur Jourdain. Hola! monsieur le philosophe, vous arrivez tout à propos avec votre philosophie. Venez un peu mettre la paix entre ces personnes-ci.

Le maître de philosophie. Venons à notre leçon. Que voulez-vous apprendre?

Monsienr Jourdain. Tout ce que je pourrai: car j'ai toutes les envies du monde d'être savant; et j'enrage que mon père et ma mère ne m'aient pas fait bien étudier dans toutes les sciences quand j'étais jeune.

Le maître de philosophie. Ce sentiment est raisonnable; *nam, sine doctrina, vita est quasi mortis imago.* Vous entendez cela, et vous savez le latin, sans doute?

Monsieur Jourdain. Oui: mais faites comme si je ne le savais pas; expliquez moi ce que cela veut dire.

Le maître de philosophie. Cela veut dire que, *sans la science, la vie est presque une image de la mort.*

Monsieur Jourdain. Ce latin-là a raison.

Le maître de philosophie. N'avez-vous point quelques principes, quelques commencements des sciences?

Monsieur Jourdain. Oh! oui. Je sais lire et écrire.

Le maître de philosophie. Par où vous plaît-il que nous commencions? Voulez-vous que je vous apprenne la logique?

Monsieur Jourdain. Qu'est-ce que c'est que cette logique?

Le maître de philosophie. C'est elle qui enseigne les trois opérations de l'esprit.

Monsieur Jourdain. Qui sont-elles, ces trois opérations de l'esprit?

Le maître de philosophie. La première, la seconde, et la troisième. La première est de bien concevoir, par le moyen des universaux; la seconde, de bien juger, par le moyen des catégories; et la troisième, de bien tirer une conséquence, par le moyen des figures, *Barbara, celarent, Darii, ferio, baralipton, etc.*

Monsieur Jourdain. Voilá des mots qui sont trop rébarbatifs. Cette logique-là ne me revient point. Apprenons autre chose qui soit plus joli.

Le maître de philosophie. Voulez-vous apprendre la morale?

Monsieur Jourdain. La morale?

Le maître de philosophie. Oui.

Monsieur Jourdain. Qu'est-ce qu'elle dit, cette morale?

Le maître de philosophie. Elle traite de la félicité; enseigne aux hommes à modérer leurs passions, et . . . .

Monsieur Jourdain. Non, laissons cela: je suis bilieux comme tous les diables, et il n'y a morale qui tienne; je me veux mettre en colère.

Le maître de philosophie. Est-ce la physique que vous voulez apprendre?

Monsieur Jourdain. Qu'est-ce qu'elle chante, cette physique?

Le maître de philosophie. La physique est celle qui explique les principes des choses naturelles et les propriétés des corps; qui discourt de la

nature des éléments, des métaux, des minéraux, des pierres, des plantes et des animaux, et nous enseigne les causes de tous les météores, l'arc-en-ciel, les feux volants, les comètes, les éclairs, le tonnerre, la foudre, la pluie, la neige, la grêle, les vents et les tourbillons.

Monsieur Jourdain. Il y a trop de tintamarre là-dedans, trop de brouillamini.

Le maître de philosophie. Que voulez-vous donc que je vous apprenne?

Monsieur Jourdain. Apprenez-moi l'orthographe.

Le maître de philosophie. Très volontiers.

Monsieur Jourdain. Après, vous m'apprendrez l'almanach, pour savoir quand il y a de la lune, et quand il n'y en a point,

Le maître de philosophie. Soit. Pour bien suivre votre pensée, et traiter cette matière en philosophe, il faut commencer, selon l'ordre des choses, par une exacte connaissance de la nature des lettres et de la différente manière de les prononcer toutes. Et là-dessus j'ai à vous dire que les lettres sont divisées en voyelles, ainsi dites voyelles parcequ'elles expriment les voix; et en consonnes, ainsi appelées consonnes parcequ'elles sonnent avec les voyelles et ne font que marquer les diverses articulations des voix. Il y a cinq voyelles ou voix, A, E, I, O, U.

Monsieur Jourdain. J'entends tout cela.

Le maître de philosophie. La voix A se forme en ouvrant fort la bouche: A.

Monsieur Jourdain. A, A. Oui.

Le maître de philosophie. La voix E se forme en rapprochant la mâchoire d'en bas de celle d'en haut: A, E.

Monsieur Jourdain. A, E, A, E. Ma foi, oui. Ah! que cela est beau!

Le maître de philosophie. Et la voix I, en rapprochant encore davantage les mâchoires l'une de l'autre, et écartant les deux coins de la bouche vers les oreilles: A, E, I.

Monsieur Jourdain. A, E, I, I, I, I. Cela est vrai. Vive la science!

Le maître de philosophie. La voix O se forme en rouvrant les mâchoires et rapprochant les lèvres par les deux coins, le haut et le bas: O.

Monsieur Jourdain. O, O. Il n'y a rien de plus juste. A, E, I, O; I, O. Cela est admirable! I, O; I, O.

Le maître de philosophie. L'ouverture de la bouche fait justement comme un petit rond qui représente un O.

Monsieur Jourdain. O, O, O. Vous avez raison. O. Ah! la belle chose que de savoir quelque chose!

Le maître de philosophie. La voix U se forme en rapprochant les dents sans les joindre entièrement, en allongeant les deux lèvres en dehors, les approchant aussi l'une de l'autre, sans les joindre tout à fait: U.

Monsieur Jourdain. U, U. Il n'y a rien de plus véritable. U.

Le maître de philosophie. Vos deux lèvres s'allongent comme si vous

faisiez la moue; d'où vient que, si vous la voulez faire à quelqu'un, et vous moquer de lui, vous ne sauriez dire que U.

Monsieur Jourdain. U, U. Cela est vrai. Ah! que n'ai-je étudié plus tôt pour savoir tout cela!

Le maître de philosophie. Demain, nous verrons les autres lettres, qui sont les consonnes.

Monsieur Jourdain. Je vous remercie de tout mon cœur, et je vous prie de venir demain de bonne heure.

Le maître de philosophie. Je n'y manquerai pas.

(Des éclats de rire, des bravos, ce sont fait entendre de tous les côtés.)

Le comte de Frontenac. On se croirait au royaume des lys.

FIRST READING LESSON.

LETTRE DU PÈRE MARQUETTE.

(Le départ. Les peuples de la folle avoine. Ce que c'est que la folle avoine.)

Le jour de l'Immaculée Conception de la Ste. Vierge M. Joliet arriva avec les ordres de M. le comte de Frontenac, notre gouverneur, et de M. Talon, notre intendant, pour faire avec moi la découverte de la grande rivière appelée par les sauvages Mississippi, qui conduit au Nouveau Mexique.

Nous ne fûmes pas longtemps à préparer notre équipage; du blé d'Inde avec quelque viande boucanée furent toutes nos provisions, avec lesquelles nous nous embarquâmes sur deux canots d'écorce, M. Joliet et moi avec cinq hommes, bien résolus à tout faire et à tout souffrir pour une si glorieuse entreprise.

Nous partîmes le 17 jour de mai 1673 de la mission de St. Ignace à Michilimackinac.

La première nation que nous rencontrâmes fut celle de la folle avoine.

La folle avoine dont ils portent le nom, parcequ'elle se trouve sur leurs terres, est une sorte d'herbe qui croît naturellement dans les petites rivières dont le fond est de vase, et dans les lieux marécageux: elle est bien semblable à la folle avoine qui croît parmi nos blés. Les épis sont sur des tuyeaux noués d'espace en espace, ils sortent de l'eau vers le mois de juin, et vont toujours montant jusqu'à ce qu'ils surnagent de deux pieds environ. Le grain n'est pas plus gros que celui de nos avoines,

mais il est une fois plus long, aussi la farine en est-elle plus abondante.

Dans le mois de septembre, qui est le temps propre pour cette récolte, ils vont en canot au travers de ce champs de folle avoine, ils en secouent les épis dans le canot à mesure qu'ils avancent; le grain tombe aisément s'il est mûr, et en peu de temps ils en font leur provision.

Pour le nettoyer de la paille et le dépouiller d'une pellicule dans laquelle il est enfermé, ils le mettent sécher à la fumée, sur un gril de bois sous lequel ils entretiennent un petit feu, pendant quelques jours, et lorsque l'avoine est bien sèche ils la mettent dans une peau en forme de *pouche*, laquelle ils enfoncent dans un trou fait à ce dessein en terre; puis ils la pillent avec les pieds, tant et si fortement que le grain, s'étant séparé de la paille, ils le vannent très aisément, après quoi ils le pillent pour le réduire en farine, ou même sans être pillé ils le font cuire dans l'eau, qu'ils assaisonnent avec de la graisse; et de cette façon on trouve la folle avoine presque aussi délicate qu'est le riz, quand on n'y met pas de meilleur assaisonnement.

Après avoir prié Dieu et avoir donné quelques instructions à la nation de la folle avoine, nous nous séparons d'eux et nous arrivâmes peu de temps après dans le fond de la baie *des Puants*,[1] ou la baie salée, ainsi appelée par cette nation.

Nous quittâmes cette baie pour entrer dans la rivière qui s'y décharge; elle est trés belle en son embouchure et coule doucement; elle est pleine d'outardes, de canards, de cercelles et d'autres oiseaux qui y sont attirés par la folle avoine.

Quand on a un peu avancé dans cette rivière, on la trouve très difficile, tant à cause des courants que des roches affilées, qui coupent les canots et les pieds de ceux qui sont obligés de les traîner quand les eaux sont basses.

[1] Une quantité de vase et de boue se rencontre dans cette baie, d'où s'élèvent continuellement de méchantes vapeurs.

BOOK REVIEW.

American Political History to the Death of Lincoln. Popularly told by VIOLA A. CONKLIN. 800. Pp. xv+435. Price $1.50. Henry Holt & Co., 1902.

THIS work is of necessity general and very much condensed — the first two chapters on "The Old Dominion" and "The New England Theocracy," seeming almost "packed," but with well selected material. The quotations with which the book abounds, from Jefferson on the Town Meeting to the final tribute to Lincoln, are very pertinent.

The immediate pre-Revolutionary period is well treated. The introduction of Barré's speech and Burke's wise words is happy, as well as the excellent references to Pitt, and the Colonial donation responses, though more emphasis might be laid on the desire, in common with the colonists, of the new Whigs for more liberty and increased representation.

One marked excellence is in limiting the details of the War of Independence to a few pages, containing forcible examples of loyalty and side lights on contemporary European conditions, which, in spite of their important bearing, are often omitted from text-books, and in consequence remain wholly unknown to the average student.

The Critical Period, presented in the chapters on "The Confederation" and "The Constitution," is well treated, and includes good accounts of the Ordinance of 1787, commercial negotiations with foreign countries, and our own domestic development of trade.

The grouping of the earlier part of the book is better than the later division of the book into Presidencies.

A perusal of what the author has to say on currency, the tariff and commercial expansion will be of special and timely interest. Though a political history, social and industrial influences and events which were at work shaping our institutions, are not neglected.

IDA M. PAHLMAN.

J. N. THORP SCHOOL,
Chicago.

EDITORIAL.

THE Elementary School of the School of Education is composed of children ranging in age from three to fifteen years, under the direct supervision of trained, experienced teachers, who are assisted in their work by the departmental teachers and by the pedagogic students.

In appreciation of the fact that one teacher cannot give individual attention to a large number of children, the school is divided into groups numbering not more than twenty pupils in each.

The central thought determining the movement of the school is that of community life. The attempt to respond to the needs of society in the work of the school was begun by Colonel Parker in the Cook County Normal School in 1883. A completer organization of the school as an ideal community, and its interpretation in relation to the larger community, has been throughout the problem upon which the work of the faculty has been directed. The school has borne various titles, the Cook County Normal School, the Chicago Normal School, the Chicago Institute, and the School of Education, but the continuity of its history is to be found in the effort to comprehend the terms of this problem.

The purpose of making the school a community in harmony with society leads to the recognition of occupations as fundamental in the lesser as they are in the greater community. Thus the occupations of gardening, cooking, housekeeping, making of clothing, wood-working, have come by degrees to be regarded of first importance. Conviction is growing that the basic occupations should be the center around which the school community must organize itself.

These occupations involve materials and process which call for explanation and extension of knowledge into all fields of investigation; the subjects of history, literature, languages, science, mathematics, and geography find their most effective use in response to this demand. This knowledge is reached by contact with real objects, natural and cultural, through field excursions, visits to industrial centers, museums, art galleries, and through the medium of books.

The child is given an opportunity for the full expression of the power developed through social activities, interpreted through subject-matter, in the arts of drawing, painting, modeling, music, and dramatic expression.

Perfect physical control is essential to free expression. Under ideal conditions work itself would produce a well-developed body, but with the defects of inheritance and ill-adjusted work, gymnastic training is necessitated as corrective and supplementary means.

The school should not only relate itself with society as a whole, but it should create conditions for artistic work and play within its own circle. Work and play of the right sort themselves call out the social virtues, yet certain practical measures may be taken toward the fostering of the friendly spirit between individuals, and of energetic co-operation in plans of the whole. The free and natural intercourse in shop-work and in the field is a good counterbalance to book study, of which the tendency is toward isolation. All exercises and ceremonies which keep the school as a whole in evidence, help maintain the desired social attitude. The morning exercises are the social center of the school. It is to the school community what the fireside is to the home — a place where the entire family, from the kindergarten to the pedagogic students and the faculty, meet to exchange that which each deems of worth for the general good. "It is the clearing-house for the entire school work," a place where the experience and knowledge acquired by any individual or division may be presented to the school. The celebration of holidays and fête days unifies the school community and furnishes a stimulus for study and expression.

The value to the child of free normal intercourse with people of maturity and right ideals is of supreme importance in the development of breadth of moral and mental attitude. The intimate association of the children with each other, with the pedagogic students and the faculty — that is, the mingling of all ages in work, play, and social functions — is the greatest factor in the social movement of the school. Nowhere is this result more apparent than in the purely social functions, parties, receptions, and luncheons given by one division of the school to another, to the parents, or the faculty. Through the general parents' meetings which bring together the parents of all the children, and the special meetings of the parents of the different groups, an effort is made to form a closer union between the family and the school. Here the teachers and parents work together for a more clearly defined purpose of education, a more complete development of the child.

ZONIA BABER.